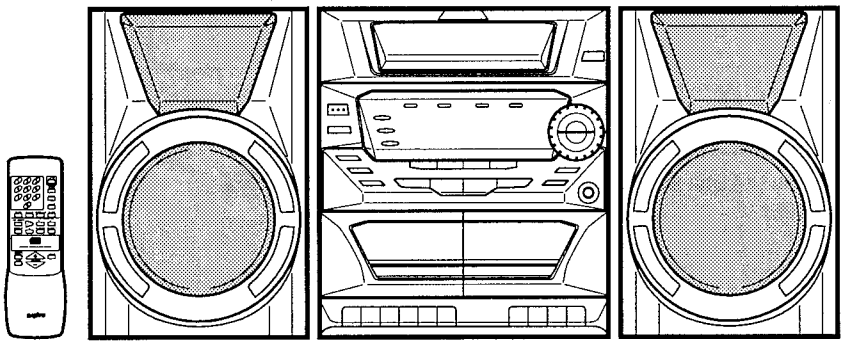
SANYO

Service Manual Mini Component System DC-C10



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PRODUCT CODE No.
129 554 05

REFERENCE No. SM5810009

SPECIFICATIONS

Tuner

Reception frequency ..... FM : 87.5 - 108.0 MHz
MW : 522 - 1611 kHz
LW : 144 - 288 kHz

CD player

Type ..... Changer, 3-disc
Channels ..... 2-channel stereo
Sampling frequency ..... 44.1 kHz
Pick-up ..... Optical 3-beam semiconductor laser
Frequency response ..... 20 Hz to 20 kHz
Wow and Flutter ..... Below measurable limits

Cassette deck section

Track system ..... 4-track, 2-channel stereo
Frequency response ..... 80 Hz - 13.5 kHz (Normal tape)
Signal to noise ratio ..... 45 dB
Wow and Flutter ..... 0.15% (WRMS)
Fast forward / Rewind time .... Approx. 110 sec. (C-60)

General

Output power ..... 15 W x 2 (at 6 ohms, 10% distortion)
Inputs ..... VIDEO IN : 400 mV / 50k ohms
Outputs ..... SPEAKERS : 6 ohms
PHONES : 8 - 32 ohms
Power requirements ..... AC 230 V, 50 Hz
Power consumption ..... 45 W
Dimensions (W x H x D) ..... Approx. 270 x 300 x 307 mm
Weight ..... Approx. 5.8 kg

RB-C10 Wireless remote control

Power requirements ..... 2 "AA" batteries
Dimensions (W x H x D) ..... Approx. 56 x 168 x 26 mm
Weight ..... Approx. 73 g (without batteries)

SX-C10 Speaker system

Type ..... 2 way bass reflex
Drivers ..... Woofer : 12 cm cone type
Tweeter : piezoelectric
Maximum
Power-handling capacity ..... 25 Watts (peak)
Nominal impedance ..... 6 ohms
Dimensions (W x H x D) ..... Approx. 200 x 300 x 206 mm
Weight ..... Approx. 2.3 kg (per speaker)

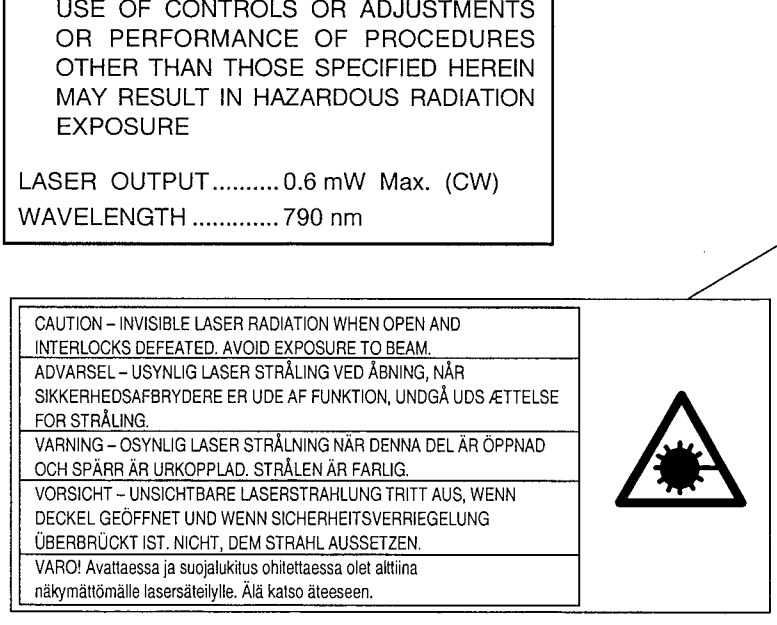
Specifications subject to change without notice.

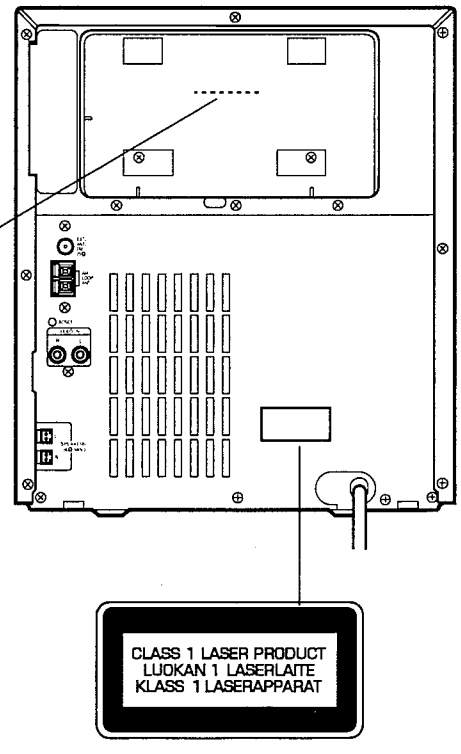
LASER BEAM SAFETY PRECAUTION

- Pick-up that emits a laser beam is used in this CD player section.

CAUTION :
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

LASER OUTPUT ..... 0.6 mW Max. (CW)
WAVELENGTH ..... 790 nm

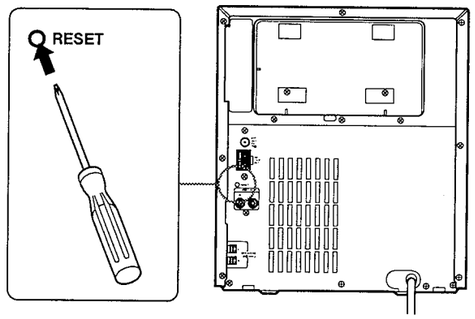

CAUTION – INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL – USYNLIG LASER STRÅLING VED ÅBNING, NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION, UNDGÅ UDS ÆTTELSE FOR STRÅLING.
VARNING – OSYNLIG LASER STRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRR ÄR URKOPPLAD. STRÅLEN ÄR FARLIG.
VORSICHT – UNSICHTBARE LASERSTRAHLUNG TRITT AUS, WENN DECKEL GEÖFFNET UND WENN SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT IST. NICHT, DEM STRAHL AUSSETZEN.
VARO! Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso äteeseen.



WHAT TO DO IF

- If the operation of the unit or display is not normal, or you wish to clear the contents of the memory.

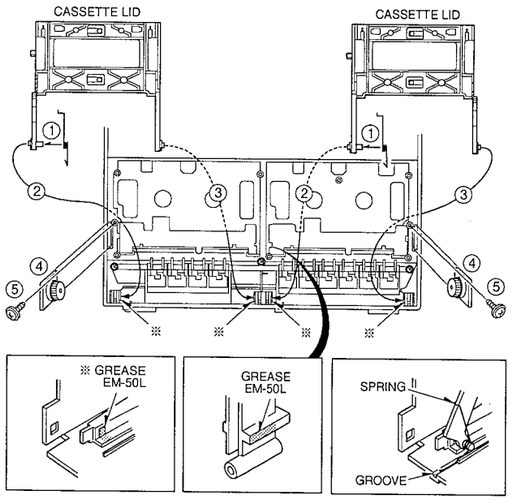
1. Disconnect the power cord from AC outlet.
2. Press the **RESET** button for at least **20** seconds.
3. Connect the power cord.
4. Press the **POWER** button to turn the power on.



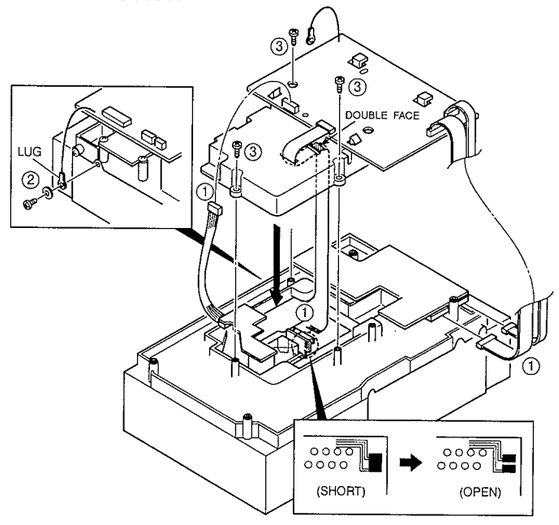
REMOVAL AND INSTALLATION

- Disconnect the power cord's plug from the electrical outlet.
- All wiring should be returned to the original position after work is completed.
- First have ready may the new FIXERS(614 129 4971) for replacement.

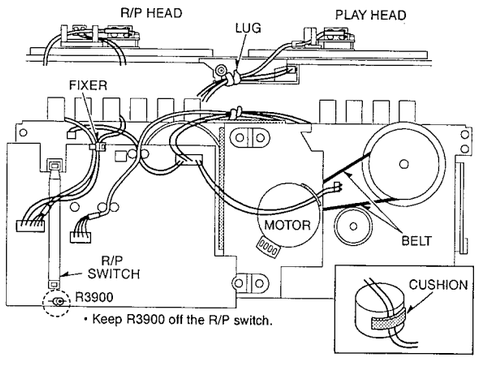
1. CASSETTE LID



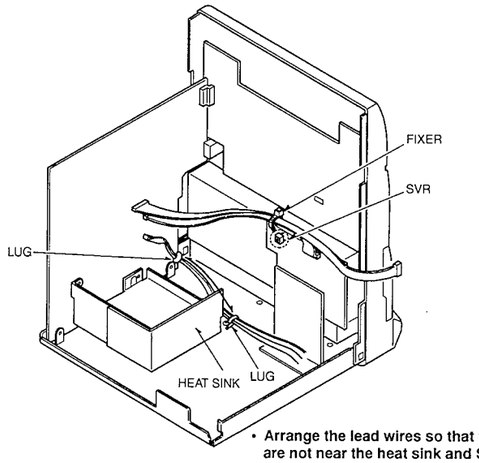
2. CD SECTION



3. TAPE MECHANISM



4. WIRING LAYOUT



CD PICK-UP MAINTENANCE

About pick-up (Optical lens) Cleaning

Clean the lens with the specified cleaning disc or moisten a cotton swab with isopropyl alcohol and cleaning paper.

Specified cleaning disc : LC-1 (Part code : 645 026 1961 ..... manufactured by SANYO.)

Regarding procedure of cleaning with moisten cotton swab, please refer to the attached as follows.

1. Cotton swab wrapped with Cleaning paper
2. Add the isopropyl alcohol
3. Gently move the tip of cotton swab just like a draw a whirlpool from inside to outside on the surface of lens.

SERVICE MODE

1. Preparation

Press the unit's STOP and FM MODE buttons at the same time. (This initiates service mode entry status.)

Next, press another button on the unit to switch to the corresponding service mode.

The unit enters a service mode only if another button is pressed during that 1 second.

2. CD Repair

1. Within 1 second of activating service mode entry status, press the CD BACK button to enter this service mode.
2. When in the CD function mode the LCD segment displays a CD operation indication that is different from its normal indication.
   If a CD error occurs, a display appears as shown in below.
   Also, from the point at which the error occurred onward, the CD operation display is fixed. The fixed displays is canceled by pressing the STOP button when the CD is stopped.
3. Press the POWER button to cancel this mode.

Disc No.	State of CD Error
0	Good
1	Focusing is not possible in focus serch.
2	The subcode is not input during disc startup.
3	TOC can not be read.
4	Focus was lost while the servo was on. (during playing, etc.)
5	The subcode is not input while the servo in on. (during playing, etc.)

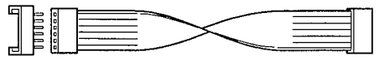
3. Checking the FL connection

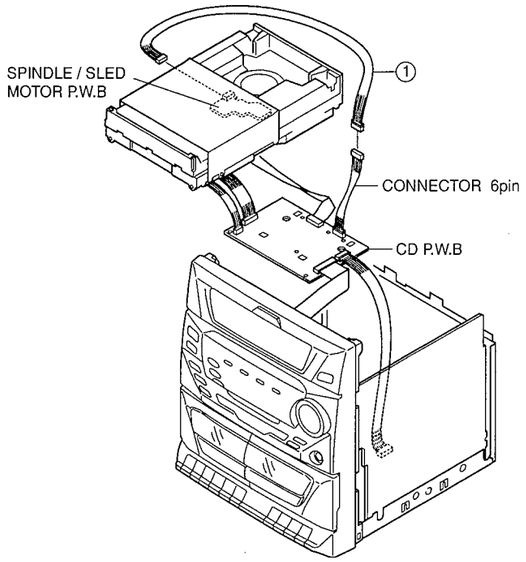
1. Within 1 second of activating service mode entry status, press the TUNING UP button to enter this service mode.
2. FL and LED turns on order when enter this mode.
3. When every indication turns on, become on and off light indication.
4. Press the POWER button to cancel this mode.

CD PLAYER ADJUSTMENTS

1. CABLE CONNECTION

① ASSY, CONNECTOR-S (614 303 5633)

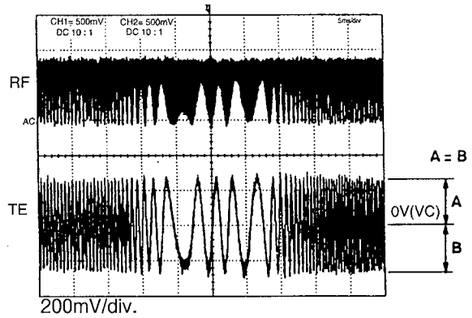




2. ADJUSTMENTS

(1) Confirm the tracking balance

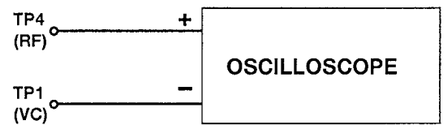
1. Connect an Oscilloscope to TP2 (TE) and TP1 (VC).
2. Turn on the POWER switch.
3. Set the test disc. (DISC 1)
4. Press "STOP" button and "FM MODE" button simultaneously. Within 1 second after pressing the "PLAY/PAUSE" button. (SERVICE MODE : Tracking balance adjustment mode)
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V (VC).

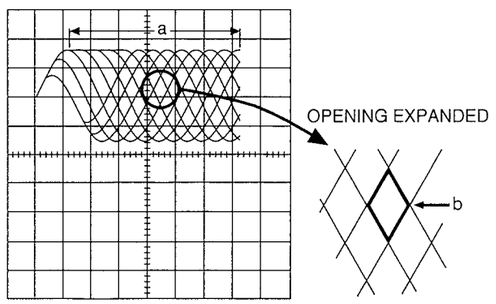


200mV/div.
5ms/div.

(2) Checking the "eye" pattern

1. Switch "ON" the POWER.
2. Connect an oscilloscope to TP4 (RF) and TP1 (VC).
3. Load the test disc.
4. Press the PLAY button.
5. Check to be sure that the "eye" pattern is at the center of waveform and that the diamond shape is clearly defined.
6. Press the STOP button.
7. Turn off the POWER switch.





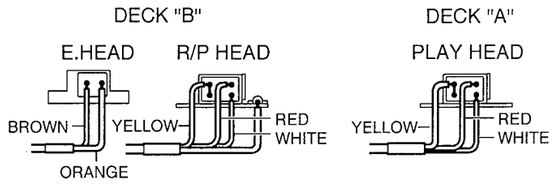
TAPE ADJUSTMENTS

Adjustment Item	Test Tape	Measuring Instrument	Output connection	Adjust location	Adjust value
(a) HEAD AZIMUTH DECK "A"	VTT738 etc. (10KHz)	AC-voltmeter	SPEAKER TERMINAL	HEAD AZIMUTH SCREW	Max.
(b) HEAD AZIMUTH DECK "B"	VTT738 etc. (10KHz)	AC-voltmeter	SPEAKER TERMINAL	HEAD AZIMUTH SCREW	Max.
(c) MOTOR SPEED (NORMAL)	MTT-111 (3,000Hz)	FREQUENCY COUNTER	SPEAKER TERMINAL	VR301	3,000Hz

1. HEAD REPLACEMENT AND AZIMUTH ADJUSTMENT

(1) Head replacement

1. After replacement, demagnetize the heads by using a degausser.
2. Be sure to clean the heads before attempting to make any adjustments.
3. Be sure both channels (1 and 2) are the same level. (Using a dual-channels oscilloscope).
4. All wiring should be returned to the original position after work is completed.



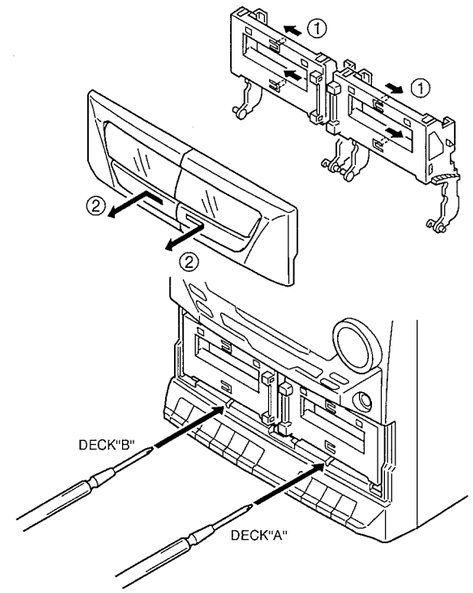
(2) Head azimuth

• DECK "A"

1. Remove the right side of CASSETTE LID.
2. Load a test tape (VTT-738, etc. :10KHz) for azimuth adjustment.
3. Press the PLAY button.
4. Use a flat-tip (-) screwdriver to turn the screw for normal azimuth adjustment so that the left and right outputs are maximized at the same phase during normal playback.
5. Press the STOP button

• DECK "B"

1. Remove the left side of CASSETTE LID.
2. Load a test for azimuth adjustment.
3. Press the PLAY button
4. Azimuth screw adjustment.
5. Press the STOP button.

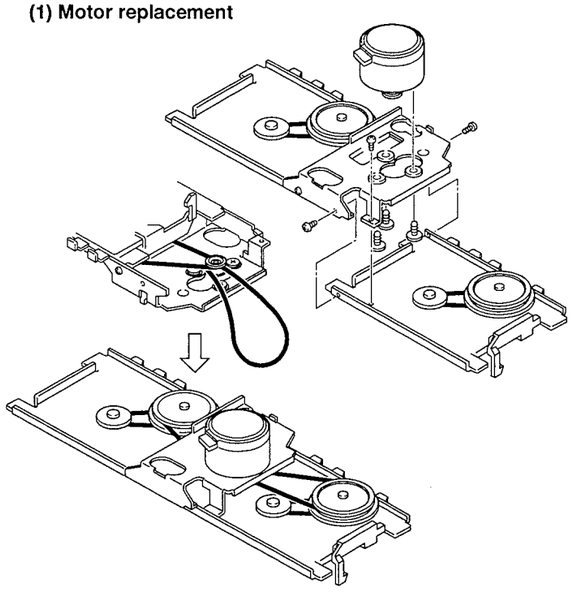


• After making the adjustment, secure the azimuth adjustment screw by applying screw lock (TB-1401B).

TAPE ADJUSTMENTS

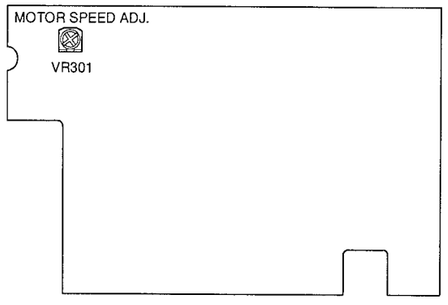
2. MOTOR REPLACEMENT AND SPEED ADJUSTMENT

(1) Motor replacement



(2) Motor speed

1. Insert the test tape (MTT-111 or etc. 3,000 Hz) into DECK"A"
2. Press the PLAY button.
3. Adjust VR301 so that the frequency counter show a reading of 3,000Hz.
4. Press the STOP button.



3. CHECKING THE MECHANISM TORQUES

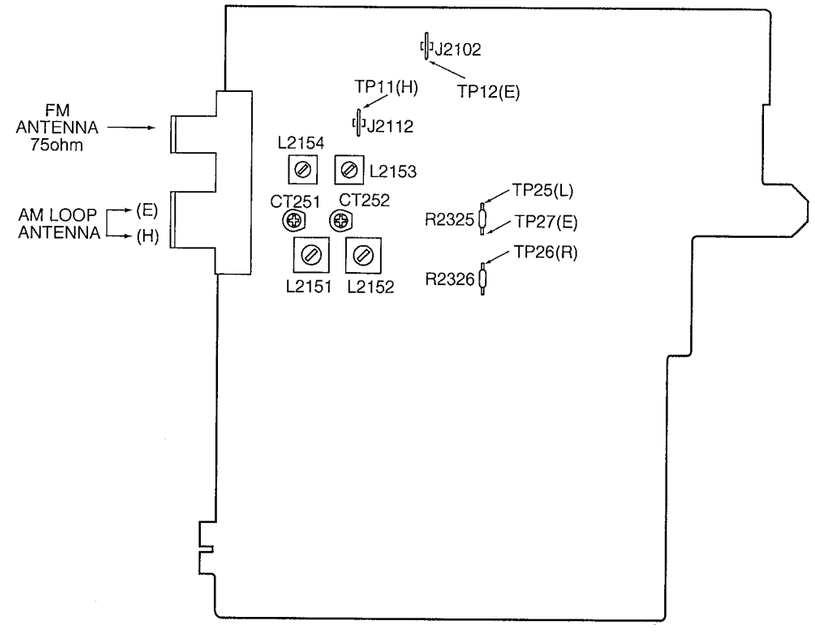
- Clean the head, capstan and pinch roller before making any measurement.

DECK " A & B"

Measureent	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY : TW-2111A F.FWD/REW : TW-2231	PLAY : TW-2111A	Drive-power cassette TW-2412
PLAY	30 ~ 60gr.cm	2.0 ~ 5.0gr.cm	60 gr or more
F.FWD/REW	55 ~ 120gr.cm	-	-

TUNER ADJUSTMENTS

1. PARTS LOCATION



2. ADJUSTMENT

SG RF Level : 75Ω open Voltage dBμV
Antenna : 75Ω unbalanced , Modulation : 1 kHz
Dev. : ±22.5kHz(MONO) ±22.5kHz(STEREO) ±6.75kHz(PILOT)

(1) FM

Step	Adjusting Circuit	Connection Input	Connection Output	SG Frequency	Set Position	Adjustment	Remark
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	87.5 MHZ	Low	---	more than 0.9 V
		---		108.0 MHZ	High	---	less than 9.0 V
2	Tracking	Connect FM SG to FM Antenna (SG=8dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E)	90.0 MHZ	Low	---	Max.
				106.0 MHZ	High	---	

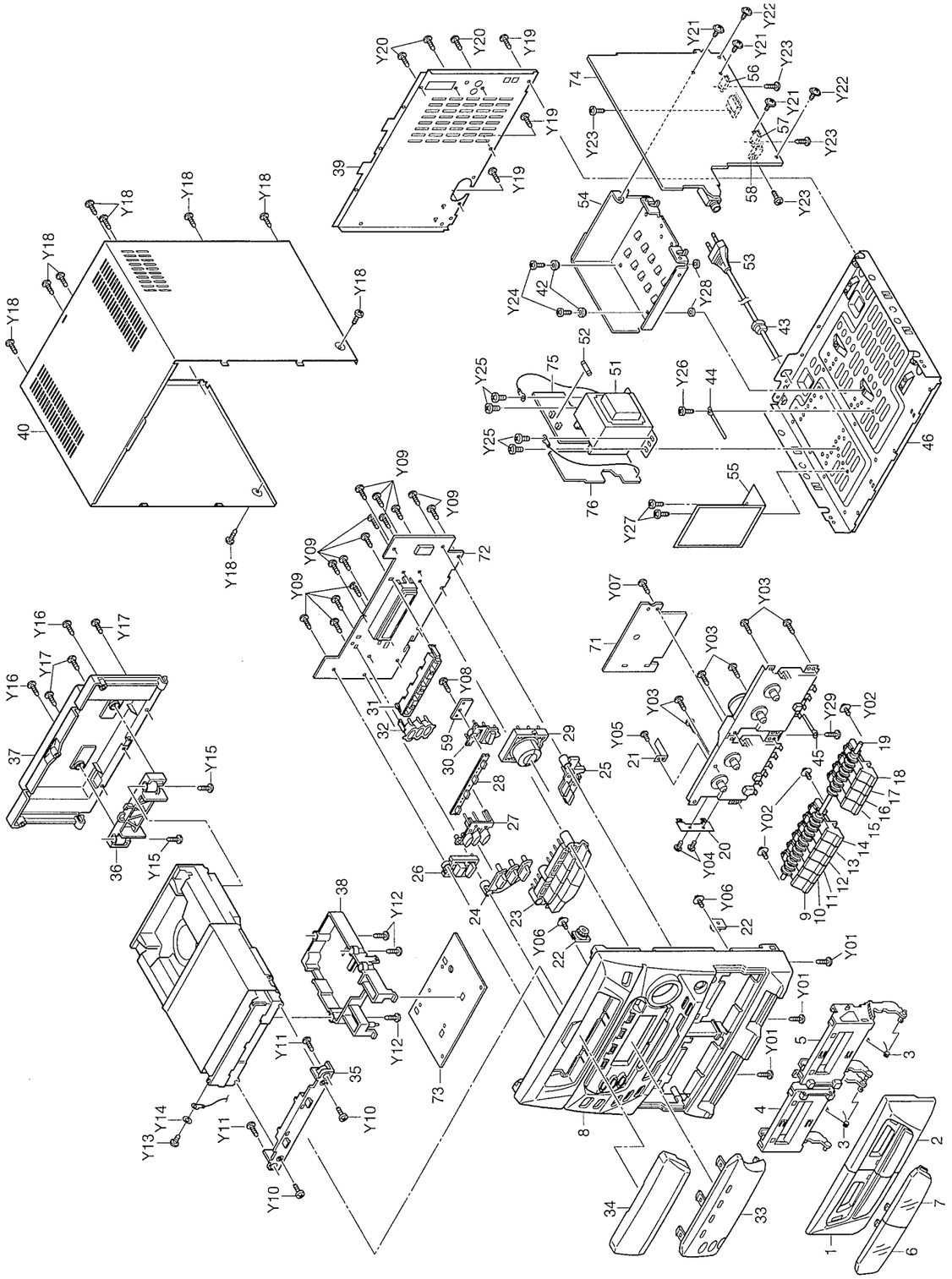
(2) MW SG Modulation : 1kHz, 30% Antenna, IRE Loop, Distance : 60 cm

Step	Adjusting Circuit	Connection Input	Connection Output	SG Frequency	Set Position	Adjustment	Remark
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	522 kHZ	Low	L2153	1.0 ± 0.05 V
		---		1611 kHZ	High	---	less than 9.0 V
2	Tracking	Connect AM SG to Test loop Ant.(SG=80dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E).	603 kHZ	Low	L2152	Max.
				1404 kHZ	High	CT252	

(3) LW

Step	Adjusting Circuit	Connection Input	Connection Output	SG Frequency	Set Position	Adjustment	Remark
1	Cover voltage	---	Connect Digital DC voltmeter to TP11(H), TP12(E).	144 kHZ	Low	L2154	1.5 ± 0.05 V
		---		288 kHZ	High	---	less than 9.0 V
2	Tracking	Connect AM SG to Test loop Ant.(SG=80dB μV)	Connect to VTVM TP25(L) or TP26(R), TP27(E).	162 kHZ	Low	L2151	Max.
				279 kHZ	High	CT251	

EXPLODED VIEW (CABINET & CHASSIS)



PARTS LIST

PRODUCT SAFETY NOTICE

EACH PRECAUTION IN THIS MANUAL SHOULD BE FOLLOWED DURING SERVICING. COMPONENTS IDENTIFIED WITH THE IEC SYMBOL ⚠ IN THE PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATED COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. WHEN REPLACING A COMPONENT IDENTIFIED BY ⚠, USE ONLY THE REPLACEMENT PARTS DESIGNATED, OR PARTS WITH THE SAME RATINGS OF RESISTANCE, WATTAGE OR VOLTAGE THAT ARE DESIGNATED IN THE PARTS LIST IN THIS MANUAL. LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS MUST BE MADE TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE PRODUCT TO THE CUSTOMER.

CAUTION : Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
Regular type resistors are less than 1/4 W carbon type and 0 ohm chip resistors.
Regular type capacitors are less than 50 V and less than 1000 µF type of Ceramic type and Electrical type.

PACKING & ACCESSORIES

REF.NO.	PART NO.	DESCRIPTION
	614 303 9235	CARTON CASE
	614 301 2245	CUSHION,TOP
	614 301 2252	CUSHION,BOTTOM
	645 024 4056	POLY SHEET,1300X550,SET
	614 231 6832	LABEL,SAFETY,CLASS 1
	614 303 9259	INSTRUCTION MANUAL
	645 005 1227	ASSY,ANTENA,LOOP
	614 229 4635	ANTENNA
	645 032 6509	REMOTE CONTROL,RB-C10
	645 035 8098	BATTERY COVER,REMOTE CONTROL
	614 303 9075	ASSY,BOX,SPEAKER,L,R (SX-C10/XE)

REF.NO.	PART NO.	DESCRIPTION
39	614 301 1811	PANEL,REAR,SEH
40	614 297 5770	ASSY,CABINET,BENDING
42	614 109 3840	BASE,HEATSINK
43	614 284 1884	FIXER,AC CORD
or	614 129 1901	FIXER,AC CODE
44	614 130 0382	LUG,BOTTOM
45	614 129 9136	LUG,DECK-MECHA LEAD
46	614 290 4954	ASSY,CABINET,BOTTOM
	614 208 0986	CUSHION,DECK-MECHA LEAD
	614 274 8190	LABEL,SAFETY, CD-MECHA PICK CAUTION

CABINET & CHASSIS

REF.NO.	PART NO.	DESCRIPTION
1	614 300 3120	COVER CASSETTE L
2	614 300 3137	COVER CASSETTE R
3	614 297 9181	SPRING,WIRE,LID,CASSETTE
4	614 289 7362	LID,CASSETTE L
5	614 289 7379	LID,CASSETTE R
6	614 300 3175	DEC WINDOW CASSETTE L
7	614 300 3199	DEC WINDOW CASSETTE R
8	614 301 2214	ASSY,CABINET,FRONT
9	614 300 3267	KNOB LEVER,B-MECHA,REC
10	614 300 3656	KNOB,LEVER,B-MECHA,PLAY
11	614 300 3663	KNOB,LEVER,B-MECHA,REW
12	614 300 3670	KNOB,LEVER,B-MECHA,FWD
13	614 300 3687	KNOB,LEVER,B-MECHA,STOP
14	614 300 3694	KNOB,LEVER,B-MECHA,PAUSE
15	614 300 3700	KNOB,LEVER,A-MECHA,PLAY
16	614 300 3717	KNOB,LEVER,A-MECHA,REW
17	614 300 3724	KNOB,LEVER,A-MECHA,FWD
18	614 300 3731	KNOB,LEVER,A-MECHA,STOP
19	614 289 6181	SHAFT,KNOB,LEVER,CASSETTE
20	614 270 8408	HOLDER,DECK PWB
21	614 270 8484	SPRING,PLATE,REC
22	614 270 8316	ASSY,GEAR
23	614 300 3205	BUTTON,CD OPERATION
24	614 300 3243	BUTTON,BAND/FM MODE/MEMORY
25	614 300 3236	BUTTON,SOUND PRESET/BASS
26	614 300 3212	BUTTON,POWER
27	614 300 3250	BUTTON,DISC 1,2,3
28	614 300 3168	DEC,SOUND PRESET
29	614 300 3182	BUTTON,VOLUME
30	614 300 3229	BUTTON,OPEN/CLOSE
31	614 300 3274	REFLECTOR,SOUND LED
32	614 300 3281	REFLECTOR,DISC 1,2,3
33	614 300 3151	DEC WINDOW FL,DISPLAY
34	614 300 3144	DEC CD TRAY,CD TRAY FRONT
35	614 300 3106	MOUNTING,CD MECHA FRONT
36	614 300 3069	MOUNTING,CD MECHA REAR
37	614 301 2290	PANEL,REAR,CD MECHA
38	614 300 3113	CD PICK COVER

FIXING PARTS

REF.NO.	PART NO.	DESCRIPTION
Y01	411 021 3503	SCR S-TPG BIN 3X10,BOTTOM-FRONT
Y02	411 020 9407	SCR S-TPG BRZ+FLG 3X14,SHAFT, KNOB,LEVER
Y03	411 021 3503	SCR S-TPG BIN 3X10, MECHA,CASSETTE
Y04	411 024 3708	SCR S-TPG PAN+FLG 2X6, HOLDER DECK PWB
Y05	411 028 2806	SCR S-TPG PAN 2X3, SPRING PLATE FOR REC
Y06	412 003 1708	SPECIAL SCREW,GEAR CASSETTE
Y07	411 021 3503	SCR S-TPG BIN 3X10, DECK-PWB/MECHA
Y08	411 021 3503	SCR S-TPG BIN 3X10,BUTTON OPEN
Y09	411 021 3503	SCR S-TPG BIN 3X10,FRONT PWB
Y10	411 021 3503	SCR S-TPG BIN 3X10, MECHA CD-MOUNT. CD FRONT
Y11	411 021 3503	SCR S-TPG BIN 3X10, MOUNT.CD FRONT-CABINET FRONT
Y12	411 021 3503	SCR S-TPG BIN 3X10, COVER PICK-CD MECHA
Y13	411 028 9201	SCR S-TPG PAN 3X4,CD-MECHA
Y14	411 092 2900	WASHER Z 3X10X1,CD-MECHA
Y15	411 021 3503	SCR S-TPG BIN 3X10, MECHA CD-MOUNT.CD REAR
Y16	411 021 3701	SCR S-TPG BIN 3X10, MOUNT.CD REAR-P.REAR
Y17	411 021 3701	SCR S-TPG BIN 3X10,PANEL REAR
Y18	411 021 3701	SCR S-TPG BIN 3X10,CABINET TOP
Y19	411 021 3701	SCR S-TPG BIN 3X10, BOTTOM PANEL REAR
Y20	411 021 3701	SCR S-TPG BIN 3X10, VIDEO IN/EXT.ANT
Y21	411 020 9902	SCR S-TPG BRZ+FLG 3X8, PWB-HEATSINK
Y22	411 020 9902	SCR S-TPG BRZ+FLG 3X8, AMP PWB-BOTTOM
Y23	411 021 6405	SCR S-TPG BIN 3X8,HEATSINK
Y24	411 021 3503	SCR S-TPG BIN 3X10, HEAT SINK-BOTTOM

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Y25	411 001 3905	SCR S-TPG BIN 4X6,TRANS
Y26	411 021 5705	SCR S-TPG BIN 3X6,BOTTOM-LUG
Y27	411 021 5705	SCR S-TPG BIN 3X6,SHIELD
Y28	412 011 6009	SPECIAL WASHER,HEATSINK
Y29	411 024 3708	SCR S-TPG PAN+FLG 2X6,LUG

ELECTRICAL PARTS

REF.NO.	PART NO.	DESCRIPTION
51	⚠ 645 031 8511	POWER TRANSFORMER
52	⚠ 423 016 9605	FUSE 250V 0.4A
53	⚠ 645 016 9939	CORD,POWER-1.74MK
or	⚠ 614 255 2513	POWER CORD
54	614 300 6626	HEAT SINK,POWER AMP
56	⚠ 405 095 1701	TR 2SD2061-F,S-12V
or	⚠ 405 095 1602	TR 2SD2061-E,S-12V
or	⚠ 405 138 6403	TR KTD2058Y,S-12V
or	614 302 9663	ASSY,SHIELD TRANS
57	⚠ 405 095 1701	TR 2SD2061-F,MOT-12V
or	⚠ 405 095 1602	TR 2SD2061-E,MOT-12V
or	⚠ 405 138 6403	TR KTD2058Y,MOT-12V
58	⚠ 409 396 8704	IC KIA7805PI
or	⚠ 409 145 2809	IC NJM7805FA
59	⚠ 614 303 2649	PWB,BUTTON
CN381	614 293 3275	ASSY,WIRE,P-HEAD LEAD,4P
CN382	614 293 3282	ASSY,WIRE,R/P HEAD LEAD,6P
CN383	614 261 5249	ASSY,WIRE,MECHA SW,6P
CN450	614 234 3210	ASSY,CONNECTOR-S,FTZ
CN681	645 033 7413	FLEXIBLE FLAT CABLE,CD-PICK UP,16P
CN682	614 302 2107	ASSY,WIRE,CD-BASE MECHA,6P
CN691	645 013 7907	FLEXIBLE FLAT CABLE,FRONT-CD,20P
	614 129 9082	LUG,FTZ

DECK P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
71	614 301 1712	ASSY,PWB,DECK (Only initial)
C3603	403 061 7702	POLYESTER 4700P J 50V
C3604	403 062 0009	POLYESTER 0.047U J 50V
C3605	403 061 1809	POLYESTER 3900P J 50V
CN301	645 005 8158	PLUG,10P
CN303	645 005 8127	PLUG,6P
CN304	614 020 6562	SOCKET,4P
or	614 223 9223	SOCKET
CN371	645 005 8110	PLUG,4P
CN372	645 005 8127	PLUG,6P
D3101	407 012 4406	DIODE 1SS133
D3102	407 012 4406	DIODE 1SS133
D3103	407 012 4406	DIODE 1SS133
D3111	407 012 4406	DIODE 1SS133
IC371	409 251 1000	IC TA8189N
L3601	645 032 5823	TRANS,OSC,85KHZ
L3701	645 004 0580	INDUCTOR,1M J
L3801	645 004 0580	INDUCTOR,1M J
Q3106	405 110 5400	TR KRA102M-A
or	405 078 2305	TR BN1A4M
or	405 001 1108	TR RN2202
or	405 000 0508	TR DTA114ES
Q3601	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
or	405 020 7402	TR 2SC945A-P
Q3602	405 011 1907	TR 2SC1627-Y
or	405 151 4905	TR KTC3200-GR
or	405 151 5001	TR KTC3200-BL
Q3701	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
or	405 020 7402	TR 2SC945A-P
Q3702	405 109 9204	TR KRC102M-A
or	405 078 2909	TR BA1A4M
or	405 001 0200	TR RN1202
or	405 000 3103	TR DTC114ES
Q3801	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 012 2002	TR 2SC1815-GR
or	405 020 7204	TR 2SC945A-K
or	405 020 7402	TR 2SC945A-P
Q3802	405 109 9204	TR KRC102M-A
or	405 078 2909	TR BA1A4M
or	405 001 0200	TR RN1202
or	405 000 3103	TR DTC114ES
R3900	⚠ 402 071 0307	FUSIBLE RES 10 JA 1/4W
or	⚠ 402 081 1004	FUSIBLE RES 10 JA 1/4W
R3902	⚠ 402 082 0501	RESISTER 82 J- 1W
S3000	614 248 9642	SWITCH,SLIDE
VR301	645 003 5579	VR,SEMI,2.2K N

FRONT P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
72	614 302 1384	ASSY,PWB,FRONT (Only initial)
BR601	614 289 5726	HOLDER,FL
C6027	403 196 4102	ELECT 1000U M 6.3V
or	403 325 0401	ELECT 1000U M 6.3V
CN601	645 009 0073	PLUG,14P
CN602	614 035 4928	SOCKET,DIP 3P
CN603	645 005 4280	SOCKET,20P
or	645 012 5249	SOCKET,FPC 20P
CN612	614 288 9480	CORD,3P CONNECTOR,FRONT_PT2
D6001	407 012 4406	DIODE 1SS133
D6002	407 012 4406	DIODE 1SS133
D6007	407 099 4603	ZENER DIODE MTZJ3.9B
D6101	408 039 4400	LED SLZ-981B-09H-AB-T1,SOUND
D6102	408 039 4400	LED SLZ-981B-09H-AB-T1,SOUND
D6103	408 039 4400	LED SLZ-981B-09H-AB-T1,SOUND
D6104	408 039 4400	LED SLZ-981B-09H-AB-T1,SOUND
D6105	408 040 0804	LED SLZ-381B-13H-AB-T2,DISC
D6106	408 040 0804	LED SLZ-381B-13H-AB-T2,DISC
D6107	408 040 0804	LED SLZ-381B-13H-AB-T2,DISC
DS601	407 203 9203	PHOTO DIODE SPS-442-1-E
FL601	645 023 5849	FLOURESCENT TUBE,FL
IC601	410 340 7209	IC LC866436B-5K99,MICON
L6001	645 001 4550	INDUCTOR,10U K
or	645 031 7835	INDUCTOR,10U K
Q6001	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q6003	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
Q6004	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q6005	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
or	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
Q6025	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
Q6026	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
Q6027	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
Q6028	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
Q6029	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
Q6030	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
Q6031	405 143 0007	TR KRC107M-A
or	405 068 4807	TR BA1A4P
or	405 000 3806	TR DTC114YS
S6301	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6302	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6303	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6304	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6305	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6306	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6307	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6308	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6309	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6310	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6401	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6402	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6403	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6404	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6405	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6406	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6407	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6408	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6409	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6410	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
S6411	645 006 5958	SWITCH,PUSH 1P-1T
or	614 220 5471	SWITCH,TACT
or	614 240 1002	SWITCH,TACT
X6001	645 018 6103	OSC,CERAMIC 6.000MHZ
X6002	645 032 1627	OSC,CRYSTAL 32.768KHZ

CD P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
73	614 304 5625	ASSY,PWB,CD (Only initial)
CN101	645 005 8110	PLUG,4P,TP1-4
CN111	645 033 5525	SOCKET,FFC 16P,CD_PICKUP
CN113	645 005 8127	PLUG,6P,BASEMECHA
CN114	614 020 6562	SOCKET,4P
or	614 223 9223	SOCKET
CN115	614 020 6609	SOCKET,8P
or	614 223 9261	SOCKET
CN122	645 012 5539	SOCKET,FPC 20P
CN123	645 006 0946	PLUG,7P
CN124	614 302 2084	ASSY,WIRE,CD-CD MECHA,4P
CN125	614 302 2091	ASSY,WIRE,CD-CD MECHA,8P
D1211	407 063 9108	ZENER DIODE MTZJ6.8B
D1221	407 099 5303	ZENER DIODE MTZJ5.6B
D1480	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
D1601	⚠ 407 148 6701	DIODE 1A3-I
D1602	⚠ 407 148 6701	DIODE 1A3-I
D1603	⚠ 407 148 6701	DIODE 1A3-I
D1604	⚠ 407 148 6701	DIODE 1A3-I
D1981	407 099 5204	ZENER DIODE MTZJ5.1B
IC101	409 378 8104	IC LA9240ML
IC102	409 435 2106	IC LC78622NE
IC103	⚠ 409 372 9602	IC LA6541
IC131	⚠ 409 441 4507	IC TA7291S(M)
IC132	⚠ 409 441 4507	IC TA7291S(M)
L1451	645 031 7835	INDUCTOR,10U K
LG101	614 129 9082	LUG,CD-MECHA
Q1301	405 008 7202	TR 2SB810-E
or	405 008 7301	TR 2SB810-F
or	405 008 6809	TR 2SB808-F-SPA
Q1401	⚠ 405 141 3604	TR KTA1273-Y
or	⚠ 405 009 5207	TR 2SB927-S
or	⚠ 405 001 9302	TR 2SA1020-Y
R1211	⚠ 402 072 0207	RESISTOR 5.6 J- 2W
or	⚠ 402 082 0709	RESISTOR 5.6 J- 2W
R1221	⚠ 402 072 0207	RESISTOR 5.6 J- 2W
or	⚠ 402 082 0709	RESISTOR 5.6 J- 2W
T1001	⚠ 407 212 0505	THERMISTOR RXE065
X1451	614 231 2667	RESONATOR

AMPLIFIER & TUNER P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
74	614 300 7296	ASSY,PWB,AMP TUNER (Only initial)
C2152	403 082 0201	POLYPRO 470P J 100V
C2155	403 082 2205	POLYPRO 560P J 100V
C2457	403 106 1603	NP-ELECT 1U Q 50V

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
C4511	403 259 0508	NP-ELECT 1U M 50V
C4514	403 259 0508	NP-ELECT 1U M 50V
C4611	403 259 0508	NP-ELECT 1U M 50V
C4614	403 259 0508	NP-ELECT 1U M 50V
C4705	403 059 8209	POLYESTER 0.22U K 50V
C4706	403 059 8209	POLYESTER 0.22U K 50V
C4805	403 059 8209	POLYESTER 0.22U K 50V
C4806	403 059 8209	POLYESTER 0.22U K 50V
C4910	403 194 3800	ELECT 2200U M 25V
or	403 329 3309	ELECT 2200U M 25V
C4911	403 329 5907	ELECT 3300U M 25V
C4987	403 059 5505	POLYESTER 0.022U J 50V
C4988	403 059 5505	POLYESTER 0.022U J 50V
C4989	403 304 4802	DL-ELECT 0.047F Z 5.5V
CN201	614 255 5750	TERMINAL
or	645 032 6394	TERMINAL
CN450	645 009 0158	SOCKET,14P
CN451	645 012 2729	SOCKET,DIP 7P
CN452	614 249 8613	SOCKET
CN460	645 012 2750	SOCKET,DIP 10P
or	614 231 2759	DIP MATE SOCKET
CN470	645 006 1875	PLUG,2P,SPEAKEROUT
CN479	645 006 1141	JACK,PHONE D6.43,HEADPHONE
CN480	645 006 1875	PLUG,2P,SPEAKEROUT
CN482	614 301 6618	ASSY,WIRE,CD-AMP
CN484	614 300 6190	ASSY,WIRE,DECK-AMP
CN491	614 020 1246	SOCKET,5P
CN493	614 254 3597	TERMINAL
or	614 221 8273	TERMINAL
CT251	645 032 5670	TRIMMER,27PF
CT252	645 032 5663	TRIMMER,7PF
D2151	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2152	407 091 5004	VARACTOR DI SVC321SPA-C-2
D2451	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2452	407 153 7502	ZENER DIODE GZS3.0B
D2454	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2455	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2456	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2461	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D2464	407 012 4406	DIODE 1SS133
or	407 012 5809	DIODE 1SS176
or	407 153 6109	DIODE 1SS119-041
or	407 007 9904	DIODE GMA01
D4470	407 012 4406	DIODE 1SS133
D4471	407 099 5402	ZENER DIODE MTZJ6.2B
D4591	407 099 5204	ZENER DIODE MTZJ5.1B
D4930	407 012 4406	DIODE 1SS133
D4931	407 099 6805	ZENER DIODE MTZJ13B
D4960	407 099 6805	ZENER DIODE MTZJ13B
D4970	407 012 4406	DIODE 1SS133
D4980	407 012 4406	DIODE 1SS133
IC231	409 379 2705	IC LA1832ML

REF.NO.	PART NO.	DESCRIPTION
IC245	409 438 9409	IC LC72121M
or	409 439 4502	IC LC72121M-D
IC458	409 434 4408	IC M62428FP
IC471	⚠ 409 441 6303	IC TDA7269A
L2151	614 255 5798	TRANS,RF
L2152	614 255 5781	TRANS,RF
L2153	614 255 5767	TRANS,OSC
L2154	614 255 5774	TRANS,OSC
L2301	645 004 0580	INDUCTOR,1M J
L2451	645 001 4581	INDUCTOR,100U K
or	645 031 7842	INDUCTOR,100U K
L4910	645 004 0511	INDUCTOR,270U J
LG403	645 023 8987	FIXER
PR497	⚠ 645 014 2499	PROTECTOR,0.4A 125V
Q2140	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2152	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2153	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2154	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2155	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2156	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2157	405 026 9004	TR 2SK222-D
Q2201	405 151 4103	TR KTC3193-Y
or	405 016 0806	TR 2SC2839-E
Q2310	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
or	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
Q2451	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q2452	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q2453	405 151 5209	TR KRA107M
or	405 078 2404	TR BN1A4P
or	405 000 0904	TR DTA114YS
Q4470	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 001 7001	TR 2SA1015-GR
or	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
Q4471	405 005 2002	TR 2SA733-P
or	405 005 1906	TR 2SA733-K
or	405 001 7001	TR 2SA1015-GR
or	405 141 3406	TR KTA1266-GR
or	405 141 3505	TR KTA1266-Y
Q4520	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR

PARTS LIST

REF.NO.	PART NO.	DESCRIPTION
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4620	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4932	405 000 3806	TR DTC114YS
or	405 128 9001	TR RN1207
or	405 037 0809	TR 2SC4048
or	405 143 0007	TR KRC107M-A
Q4935	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4961	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4962	405 000 3806	TR DTC114YS
or	405 128 9001	TR RN1207
or	405 037 0809	TR 2SC4048
or	405 143 0007	TR KRC107M-A
Q4963	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4964	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
Q4965	405 020 7402	TR 2SC945A-P
or	405 020 7204	TR 2SC945A-K
or	405 012 2002	TR 2SC1815-GR
or	405 141 3307	TR KTC3198-GR
or	405 141 3208	TR KTC3198-Y
R4586	⚠ 402 081 1707	RESISTOR 120 J- 1W
or	⚠ 402 081 9406	RESISTOR 120 J- 1W
R4705	⚠ 402 078 5107	FUSIBLE RES 4.7 JA 1/4W
or	⚠ 402 081 2605	FUSIBLE RES 4.7 J- 1/4W
R4791	401 009 5803	CARBON 330 JA 1/2W
R4805	⚠ 402 078 5107	FUSIBLE RES 4.7 JA 1/4W
or	⚠ 402 081 2605	FUSIBLE RES 4.7 J- 1/4W
R4891	401 009 5803	CARBON 330 JA 1/2W
R4910	⚠ 402 078 8504	RESISTOR 1 J- 1W
or	⚠ 402 081 2308	RESISTER 1 J- 1W
S4970	614 215 9828	SWITCH,TACT
T2301	614 255 8119	FILTER,LC
U2101	645 033 5327	TUNER,FM,87.5-108MHZ
X2301	645 010 0024	OSC,CERAMIC 456KHZ
or	614 246 0870	RESONATOR
X2451	645 023 4965	OSC,CRYSTAL 7.2MHZ
XF221	645 010 0079	CERAMIC FILTER 10.70MHZ
or	614 240 2917	FILTER,CERAMIC,10.7MHZ
or	614 254 3214	FILTER,10.7MHZ
XF222	645 010 0079	CERAMIC FILTER 10.70MHZ
or	614 240 2917	FILTER,CERAMIC,10.7MHZ
or	614 254 3214	FILTER,10.7MHZ
XF231	614 246 0849	FILTER,450KHZ
XF233	645 018 8824	DISCR,CERAMIC,10.70MHZ
or	645 018 8718	DISCR,CERAMIC,10.70MHZ

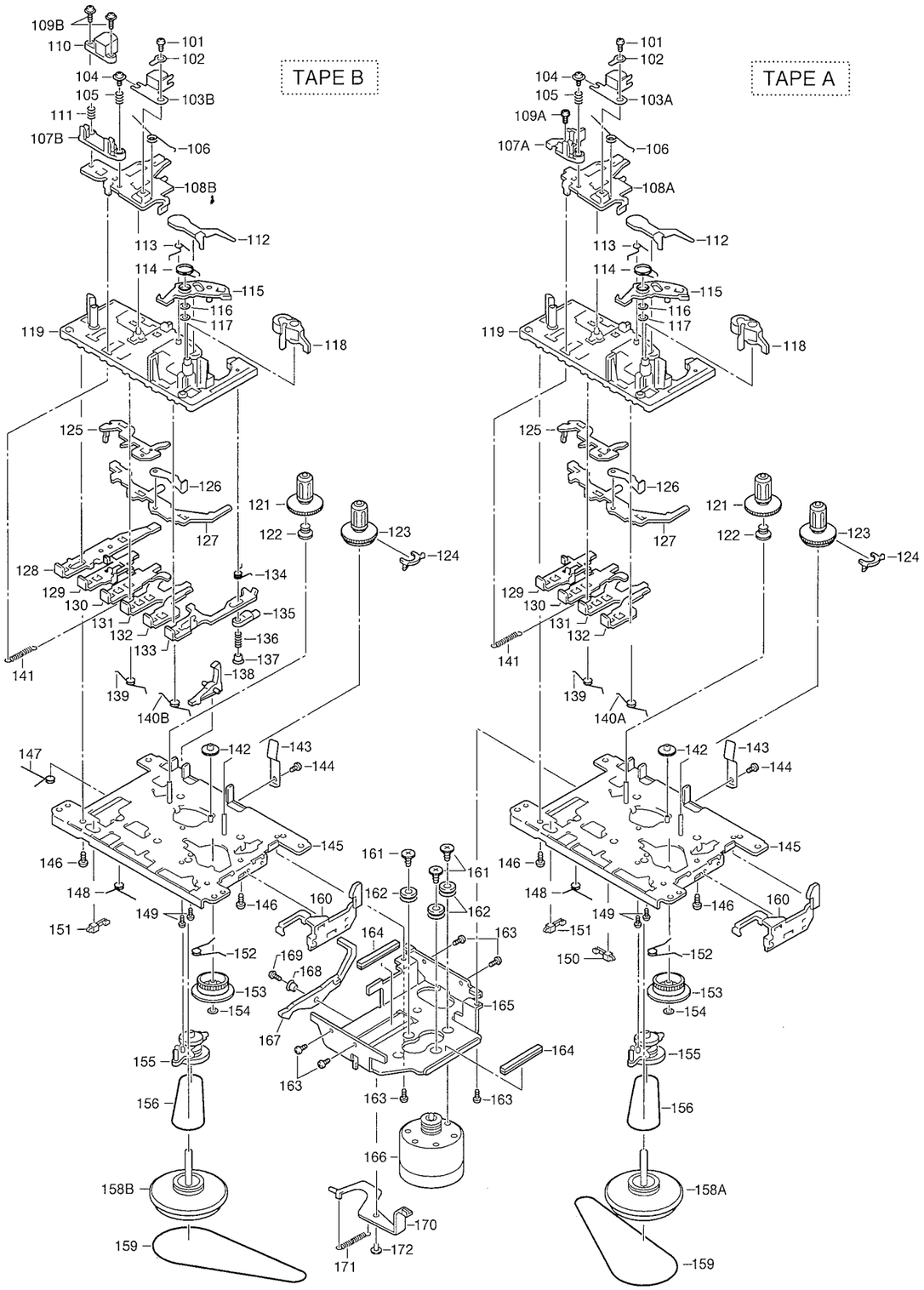
POWER TRANSFORMER, PRIMARY P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
75	614 300 7319	ASSY,PWB,PT1 (Only initial)
CN498	614 017 8203	TERMINAL BOARD
CN499	614 017 8203	TERMINAL BOARD
FCL41	645 006 4760	HOLDER,FUSE
or	645 031 7903	HOLDER,FUSE
FCL42	645 006 4760	HOLDER,FUSE
or	645 031 7903	HOLDER,FUSE
L4999	⚠ 645 017 8061	INDUCTOR,181M

POWER TRANSFORMER, SECONDARY P.W.BOARD ASSY

REF.NO.	PART NO.	DESCRIPTION
76	614 300 7302	ASSY,PWB,PT2 (Only initial)
CN490	614 020 1246	SOCKET,5P
CN495	645 005 8226	PLUG,3P
or	645 009 6433	PLUG,3P
D4901	⚠ 407 196 5800	DIODE 1N5402BD82
D4903	⚠ 407 196 5800	DIODE 1N5402BD82
D4906	⚠ 407 196 5800	DIODE 1N5402BD82
D4908	⚠ 407 196 5800	DIODE 1N5402BD82
D4950	⚠ 407 148 6701	DIODE 1A3-I
D4951	407 099 8700	ZENER DIODE MTZJ24B
D4952	407 099 5303	ZENER DIODE MTZJ5.6B
D4953	407 012 4406	DIODE 1SS133
LG401	614 129 9099	LUG
PR495	⚠ 645 014 2468	PROTECTOR,0.63A 125V
Q4950	⚠ 405 141 3604	TR KTA1273-Y
or	⚠ 405 009 5207	TR 2SB927-S
or	⚠ 405 001 9302	TR 2SA1020-Y
R4950	⚠ 402 078 8306	FUSIBLE RES 1 JA 1/2W
or	⚠ 402 081 2506	FUSIBLE RES 1J- 1/2W
R4951	⚠ 402 078 9303	RESISTOR 100 J- 1W
or	⚠ 402 081 2407	RESISTER 100 J- 1W

EXPLODED VIEW (TAPE MECHANISM)

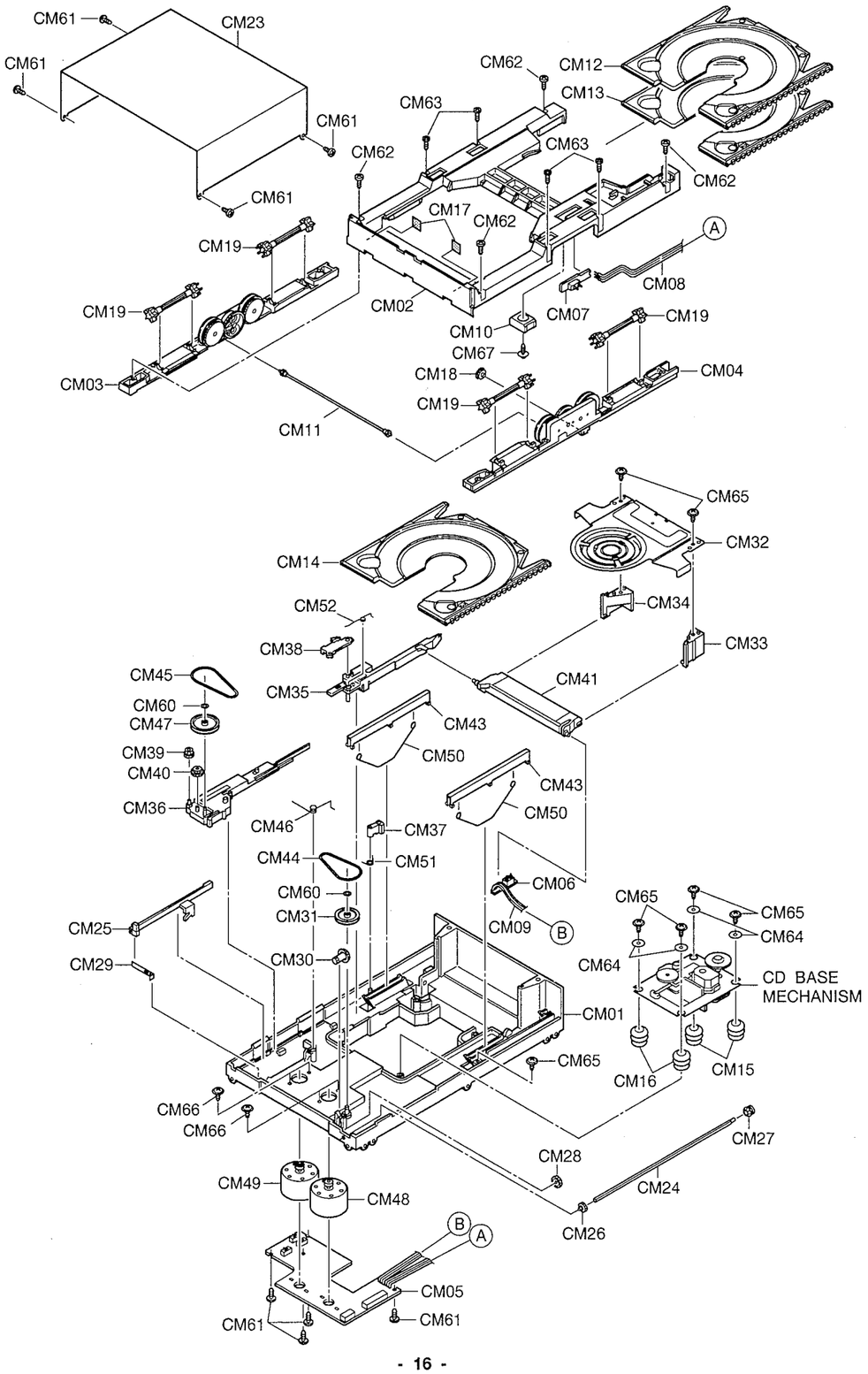


PARTS LIST

TAPE MECHANISM (TM-C10TN-SH . . . Only initial)

REF.NO.	PART NO.	DESCRIPTION
101	645 018 6714	SCREW 2.0X3
102	645 018 6707	B3 LUG 2.0
103A	614 293 6634	HEAD,PLAY
103B	614 293 6634	HEAD,REC/PLAY
104	645 009 2282	AZIMUTH SCREW M2X7
105	645 009 1551	AZIMUTH SPRING
106	645 009 1360	PANEL P SPRING
107A	645 009 1353	HEAD BASE
107B	645 010 9409	HEAD BASE
108A	645 009 1377	HEAD PANEL
108B	645 010 9416	HEAD PANEL
109A	645 009 2299	SCREW M2X6
109B	614 294 7418	(+)(-)CAP SCREW M2X8
110	645 033 3354	HEAD,ERASE
111	645 009 6891	E HEAD SPRING
112	645 009 1506	SENSING LEVER
113	645 009 1452	M CONTROL SPRING
114	645 009 1513	GEAR PLATE SPRING
115	645 025 4567	ASSY,GEAR PLATE
116	645 013 5385	P WASHER CUT
117	614 294 7425	P WASHER CUT 2.1X4.0X0.25
118	645 009 1612	PINCH ROLLER ARM ASSY
119	645 009 1308	BASE ASSY
121	645 023 8116	S REEL HUB
122	645 025 4598	BACK TENSION SPRING
123	645 025 4604	ASSY,TAKE UP REEL
124	645 009 1629	SENSOR
125	645 009 1285	SWITCH ACTUATOR
126	645 009 1339	E KICK LEVER
127	645 009 3760	PUSH BUTTON ACTUATOR
128	645 011 0757	REC BUTTON LEVER
129	645 011 0764	PLAY BUTTON LEVER
130	645 011 0771	REW BUTTON LEVER
131	645 011 0788	FF BUTTON LEVER
132	645 011 0795	STOP BUTTON LEVER
133	645 023 8147	PAUSE BUTTON LEVER
134	645 009 1407	P CONTROL SPRING
135	645 011 1211	PAUSE LEVER(E)
136	645 009 1391	PAUSE LEVER SPRING
137	645 009 1384	PAUSE STOPPER
138	645 009 1674	RECORD SAFETY LEVER
139	645 009 1414	BUTTON LEVER SPRING(A)
140A	645 011 1839	BUTTON LEVER SPRING(C)
140B	645 009 1421	BUTTON LEVER SPRING(B)
141	645 009 3210	PLAY BUTTON LEVER SPRING
142	645 009 1568	FF GEAR
143	645 022 1729	PACK SPRING PLATE
144	645 012 2774	C TAPP M2X3 SPECIAL
145	645 009 1346	CHASSIS ASSY
146	645 009 2244	P TAP BIND SCREW M2X5
147	645 009 1476	REC BUTTON LEVER SPRING
148	645 009 1445	PS LEVER SPRING
149	645 009 2268	TAP CAMERA SCREW M2X4.5
150	645 010 9560	LEAF SW MSW-17820
151	645 010 9553	LEAF SW MSW-1541T
152	645 009 1438	E ACTUATOR SPRING
153	645 009 1490	CAM GEAR
154	614 294 7433	P WASHER CUT 1.2X3.8X0.3
155	645 011 1136	RF CLUTCH ASSY
156	645 009 1766	RF BELT
158A	645 025 4574	ASSY,FLYWHEEL
158B	645 009 1773	FLYWHEEL ASSY
159	645 011 1150	MAIN BELT
160	645 010 9423	E SLIDE LEVER
161	645 011 1044	MOTOR COLLER SCREW
162	645 011 1037	MOTOR RUBBER
163	645 009 2312	C TAP SCREW M2X4
164	645 011 1198	ANTI VIBRATION FELT MAT
165	645 011 1181	MOTOR BRACKET
166	614 276 2417	ASSY,MOTOR
167	645 011 1174	P KICK LEVER(B)
168	645 009 2435	COLLAR(B)
169	645 009 2329	C TAP SCREW M2X6
170	645 011 1068	P KICK LEVER(A)
171	645 011 1051	P KICK LEVER SPRING
172	645 009 2428	PK COLLAR SCREW(A)

EXPLODED VIEW (CD CHANGER MECHANISM)



PARTS LIST

CD CHANGER MECHANISM
(PM-CDC10TP-SH . . . Only initial)

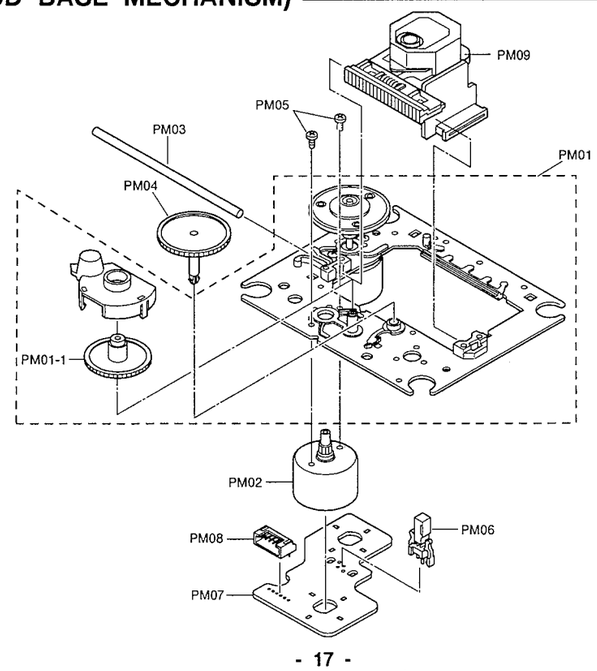
REF.NO.	PART NO.	DESCRIPTION
CM01	645 033 6072	ASSY,CHASSIS
CM02	645 033 7512	DRAWER 2
CM03	645 033 5976	ASSY,HOLDER L,DRAWER
CM04	645 033 6898	ASSY,HOLDER R3B,DRAWER
CM05	645 033 6041	ASSY,PC BOARD A
CM06	645 033 6065	ASSY,PC BOARD B
CM07	645 033 6058	ASSY,PC BOARD C
CM08	645 033 5945	LEAD WIRE
CM09	645 033 5952	LEAD WIRE
CM10	645 033 6713	SPACER SW
CM11	645 033 6027	ASSY,GEAR DRIVE,SINCHRO
CM12	645 033 6904	ASSY,CRG 100,CARRIAGE NO.1
CM13	645 033 6911	ASSY,CRG 200
CM14	645 033 6928	ASSY,CRG 300
CM15	645 033 5877	INSULATER
CM16	645 033 5884	INSULATER
CM17	645 033 5907	CUSHION
CM18	645 033 6324	BEVEL GEAR 4
CM19	645 033 5990	ASSY,GEAR STAR,CARRIAGE LIFT
CM23	645 033 6089	COVER 2
CM24	645 033 6539	SHAFT
CM25	645 033 6461	SLIDER 4
CM26	645 033 6201	GEAR SPLINE
CM27	645 033 6232	BEVEL GEAR 1
CM28	645 033 6270	GEAR IDLER 1
CM29	645 033 6102	PLATE SPRING
CM30	645 033 6287	BEVEL GEAR 3
CM31	645 033 6225	PULLEY C
CM32	645 033 6034	ASSY,CLAMPER
CM33	645 033 6140	ARM SLIDER R
CM34	645 033 6157	ARM SLIDER L
CM35	645 033 6430	SLIDER 1
CM36	645 033 5969	ASSY,SLIDER 2,FWD/RVS
CM37	645 033 6980	ARM STOPPER A2
CM38	645 033 6416	ARM STOPPER B

REF.NO.	PART NO.	DESCRIPTION
CM39	645 033 6263	GEAR IDLER A2
CM40	645 033 6218	GEAR IDLER C
CM41	645 033 6447	LEVER
CM43	645 033 6454	LIFTER,CARRIGE LIFT UP
CM44	645 033 5778	BELT
CM45	645 033 5785	BELT
CM46	645 033 7048	SPRING
CM47	645 033 6393	PULLEY A
CM48	645 033 6003	ASSY,MOTOR CARRIGE
CM49	645 033 6010	ASSY,MOTOR DRAWER
CM50	645 033 5723	SPRING
CM51	614 303 7545	SPRING
CM52	645 033 5747	SPRING
CM60	645 033 5648	WASHER
CM61	645 033 5594	SCREW
CM62	645 033 7031	SCREW
CM63	645 033 5563	SCREW
CM64	645 033 5631	WASHER
CM65	645 033 5570	SCREW
CM66	645 033 5600	SCREW
CM67	645 033 5617	SCREW

CD BASE MECHANISM
(CD213CCM-SNSH . . . Only initial)

REF.NO.	PART NO.	DESCRIPTION
PM01	645 033 6751	ASSY,MOTOR CHASSIS,BASE
PM01-1	645 033 6812	GEAR B RP,SLED GEAR
PM02	645 033 6744	ASSY,MOTOR GEAR,SLED
PM03	645 033 6805	SLED SHAFT,PICK RAIL
PM04	645 033 6799	GEAR A S,PICK DRIVE GEAR
PM05	645 033 6829	SCREW+P2*3,SLED MOTOR FIX
PM06	645 033 6775	LEAF SWITCH,LIMIT SWITCH
PM07	645 033 6782	MOTOR 6P S PWB
PM08	645 033 6768	CONNECTOR PIN 6P
PM09	614 303 5626	PICK UP

EXPLODED VIEW (CD BASE MECHANISM)



IC BLOCK DIAGRAM & DESCRIPTION

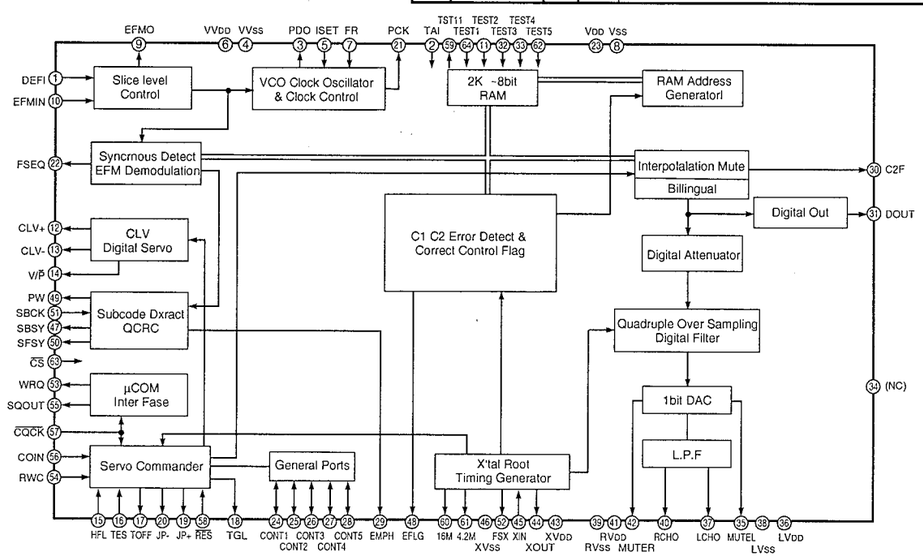
IC101 LA9240ML (Servo Signal Processor)

No.	Pin Name	I/O	Function
1	FIN2	I	Connection Pin for Photo Diode of Pickup.
2	FIN1	I	FIN2 + FIN1 = RF, FIN2 - FIN1 = FE
3	E	I	Connection Pin for Photo Diode of Pickup.
4	F	I	E - F = TE
5	TB	I	Input Pin for DC ingredient of TE Signal.
6	TE-	I	Connection Pin for Gain Setting Resistor of TE Signal to TE Signal Pin.
7	TE	O	Output Pin for Tracking Error Signal.
8	TESI	I	Input Pin for Track Error Sense Comparator. TE Signal through Band Pass, and Inputted.
9	SCI	I	Input Pin for Shock Detection.
10	TH	I	Connection Pin for Time Constant Setting of Tracking Gain.
11	TA	O	Output Pin for TA Amplifier.
12	TD-	I	Connection Pin for Constant Tracking Phase Compensation, Consist of between TD and VR.
13	TD	I	Connection Pin for Constant of Tracking Phase Compensation.
14	JP	I	Connection Pin for Amplitude Setting of Tracking Jump (Kick Pulse) Signal.
15	TO	O	Output Pin for Tracking Control Signal.
16	FD	O	Output Pin for Focusing Control Signal.
17	FD-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD and FA.
18	FA+	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD- and FA-.
19	FA-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FA and FE.
20	FE	O	Output Pin for Focusing Error Signal.
21	FE-	I	Connection Pin for Gain Setting Resistor of FE Signal to FE Signal Pin.
22	AGND	-	Ground for Analog Signal.
23	SP	O	Output Pin for Single End of Input Signal of the CV+, CV- Pin.
24	SPI	I	Input Pin for Spindle Amplifier.
25	SPG	I	Connection Pin for Gain Setting Resistor, when Spindle 12 cm Mode.
26	SP-	I	Connection Pin for Constant of Spindle Phase Compensation with SPD Pin.
27	SPD	O	Output Pin for Spindle Control Signal.
28	SLEQ	I	Connection Pin for Constant of Sled Phase Compensation.
29	SLD	O	Output Pin for Sled Control Signal.
30	SL-	I	Input Pin for Sled Signal from Micro Processor.
31	SL+	I	
32	JP-	I	Input Pin for Tracking Jump Signal from Digital
33	JP+	I	Signal Processor.
34	TGL	I	Input Pin for Tracking Gain Control Signal from Digital Signal Processor. TGL = H : Gain Low
35	TOFF	I	Input Pin for Tracking Off Control Signal from Digital Signal Processor. TOFF = H : OFF
36	TES	O	Output Pin for Track Error Sense Signal to Digital Signal Processor.
37	HFL	I	High Frequency Level Signal Use Detection Main-Beam Position is on the pit or mirror.
38	SLOF	I	Input Pin for Sled Servo Off Control.
39	CV-	I	Input Pin for Constant Linear Velocity Error
40	CV+	I	Signal from Digital Signal Processor.
41	RFSM	O	Output Pin for RF Signal.
42	RFS-	I	Connection Pin for Gain Setting of RF and Constant Setting of 3T Compensation of the EFM Signal with RFSM Pin.
43	SLC	O	Slice Level Control Signal is Output Pin. It Control Level of Data-Slice by Digital Signal Processor of the RF Waveform.
44	SLI	I	Input Pin for Level Control of Data-Slice by Digital Signal Processor.
45	DGND	-	Ground for Digital Signal.
46	FSC	O	Output Pin for Focus Search Smooth Condenser
47	TBC	O	Connection Pin for Variable Range Setting of EF Balance.
48	NC	-	No Connect
49	DEF	O	Output Pin for Defect Detection of Disc.
50	CLK	I	Input Pin for Reference Clock Pulse. (4.23 MHz of Digital Signal Processor)
51	CL	I	Input Pin of Clock Pulse for Command from Micro Processor.
52	DAT	I	Input Pin of Data for Command from Micro Processor.
53	CE	I	Input Pin of Chip Enable for Command from Micro Processor.
54	DRF	O	Output Pin for Detect of RF Level.
55	FSS	I	Select Pin for Focus Search Mode
56	VCC2	-	VCC for Servo and Digital Root.
57	REFI	I	Bus Control Connection Pin for Reference Voltage.
58	VR	O	Output Pin for Reference Voltage.
59	LF2	I	Connection Pin for Time Constant Setting of Detect Detection of the Disc.
60	PH1	I	Capacitor Connection Pin for Peak-hold of RF Signal.
61	BH1	I	Capacitor Connection Pin for Bottom-hold of RF Signal.
62	LDD	O	Output Pin of APC (Automatic Power Control) Circuit.
63	LDS	I	Input Pin of APC (Automatic Power Control) Circuit.
64	VCC1	I	VCC for RF Root.

IC BLOCK DIAGRAM & DESCRIPTION

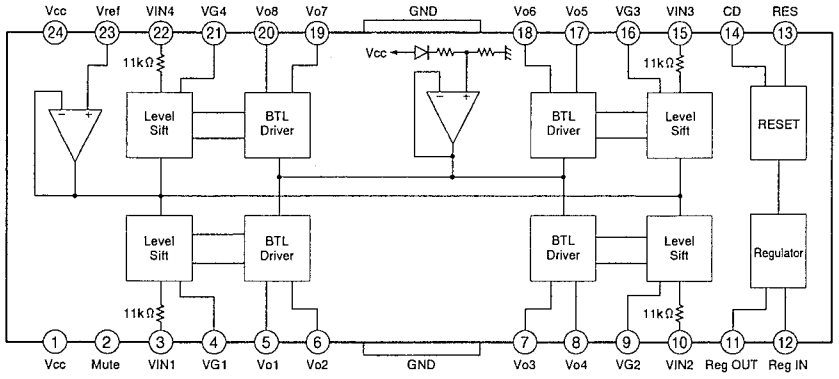
IC102 LC78622E (Digital Signal Processor)

No.	Pin Name	I/O	Function
1	DEFI	I	Input terminal for detect signal of defect
2	TAI	I	Input terminal for test.
3	PDO	O	The phase comparison output terminal for external VCO control.
4	VVSS	-	Ground terminal for built-in VCO
5	ISET	I	Resistance connection terminal for electric current adjustment of PDO output.
6	VVDD	-	Built-in VCO power supply terminal.
7	FR	I	VCO frequency range adjustment.
8	VSS	-	Ground for Digital
9	EFMO	O	EFM signal output terminal for slice level control.
10	EFMIN	I	EFM signal input terminal for slice level control.
11	TEST2	I	TEST pin. Normal time is non connection.
12	CLV+	O	Output terminal for Disc motor control.
13	CLV-	O	Output terminal for Disc motor control.
14	V/P	O	Change of rough servo / phase control Rough servo : "H", Phase control : "L"
15	HFL	I	Input terminal of track search signal.
16	TES	I	Input terminal of tracking error signal.
17	TOFF	O	Output terminal of tracking off.
18	TGL	O	Output terminal for change of tracking gain.
19	JP+	O	Output terminal for tracking jump control.
20	JP-	O	Output terminal for tracking jump control.
21	PCK	O	Clock monitor output terminal for EFM data playback. (4.3218 MHz)
22	FSEQ	O	Output terminal for detect of SYNC signal.
23	DVDD	-	+5V
24	CONT1	I/O	
25	CONT2	I/O	This output can control at serial control from
26	CONT3	I/O	micro processor.
27	CONT4	I/O	
28	CONT5	I/O	
29	EMPH	O	Output terminal of de-emphasis monitor . "H" : de-emphasis
30	C2F	O	Output terminal of C2 flag
31	DOUT	O	Output terminal of digital out
32	TEST3	I	Test pin.
33	TEST4	I	Test pin.
34	NC	-	Non connection.
35	MUTEL	O	Mute output terminal for L-ch
36	LVDD	-	Power supply for L-ch
37	LCHO	O	Output terminal for L-ch
38	LVSS	-	GND for L-ch
39	RVSS	-	GND for R-ch
40	RCHO	O	Output terminal for R-ch
41	RVDD	-	Power supply for R-ch
42	MUTER	O	Mute output terminal for R-ch
43	XVDD	-	Power supply of crystal oscillation
44	XOUT	O	Connection terminal of crystal oscillation (16.9344MHz)
45	XIN	I	Connection terminal of crystal oscillation (16.9344MHz)
46	XVSS	-	GND of crystal oscillation
47	SBSY	O	Output terminal for synchronizing signal of sub-cord block
48	EFLG	O	Output terminal for correction monitor of C1, C2, Single and Double
49	PW	O	Output terminal for sub-cord of P, Q, R, S, T, U and W
50	SFSY	O	Output terminal for synchronizing signal of sub-cord frame
51	SBCK	I	Input terminal for readout clock of sub-cord
52	FSX	O	Output terminal of Synchronizing signal (7.35kHz)
53	WRQ	O	Output terminal for standby of sub-cord Q output
54	RWC	I	Input terminal of read / write control
55	SQOUT	O	Output terminal of sub-cord Q
56	COIN	I	Input terminal of command from micro processor
57	CQCK	I	Clock input for reading sub-cord from SQOUT
58	RES	I	Reset (turn on : L)
59	TST11	O	Test pin
60	16M	O	16.9344MHz
61	4.2M	O	4.2336MHz
62	TEST5	I	Test pin
63	CS	I	Chip select terminal
64	TEST1	I	Test pin

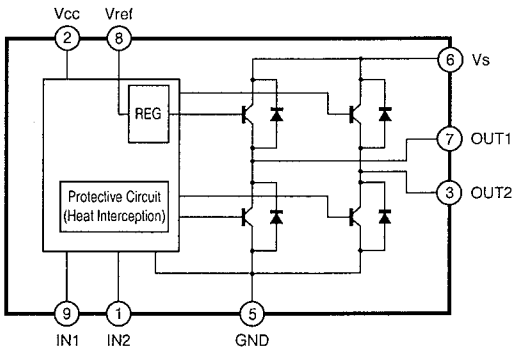


IC BLOCK DIAGRAM & DESCRIPTION

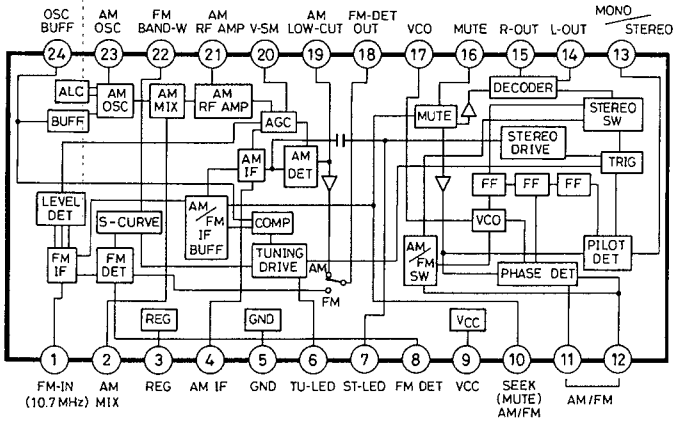
IC103 LA6541 (Pickup Actuator & CD Mechanism Motor)


Vcc Vref VIN4 VG4 Vo8 Vo7 GND Vo6 Vo5 VG3 VIN3 CD RES
11kΩ
Level Sift
BTL Driver
RESET
Regulator
Vcc Mute VIN1 VG1 Vo1 Vo2 GND Vo3 Vo4 VG2 VIN2 Reg OUT Reg IN

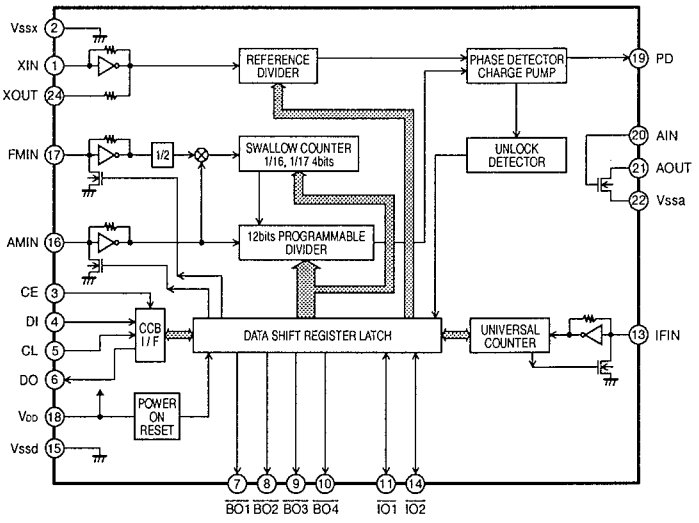
IC131, IC132 TA7291S (Bridge Driver)



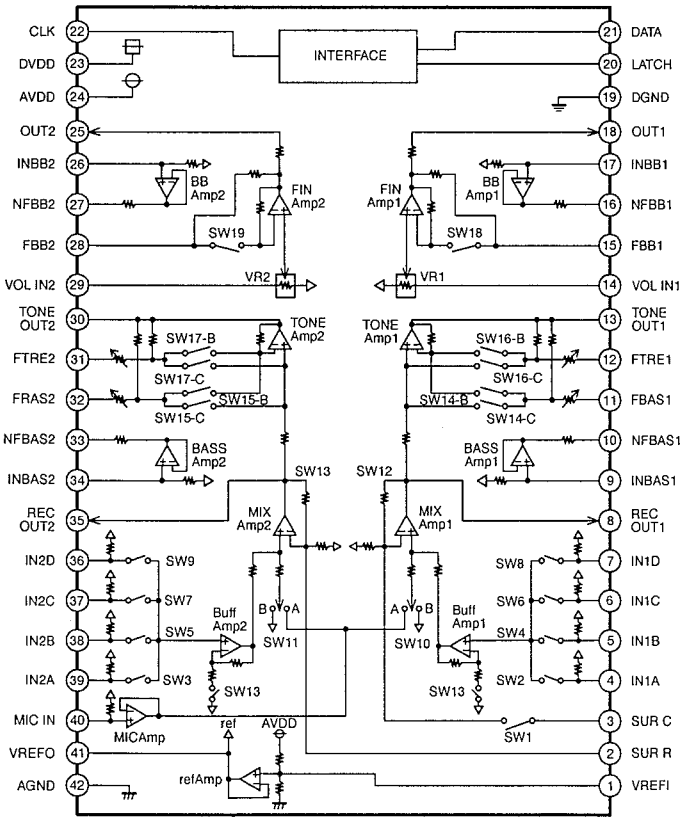
IC231 LA1832ML (AM / FM IF Amplifier & FM-MPX)


OSC BUFF AM OSC FM BAND-W AM RF AMP V-SM AM LOW-CUT FM-DET OUT VCO MUTE R-OUT L-OUT MONO STEREO
ALC AM OSC AM MIX AM RF AMP BUFF AGC
DECODER MUTE STEREO SW STEREO DRIVE TRIG
AM IF AM DET FF FF FF
LEVEL DET S-CURVE AM/FM IF BUFF COMP VCO
FM IF FM DET TUNING DRIVE AM FM SW PHASE DET PILOT DET
REG GND Vcc FM
FM-IN (10.7MHz) AM MIX REG AM IF GND TU-LED ST-LED FM DET VCC SEEK (MUTE) AM/FM AM/FM

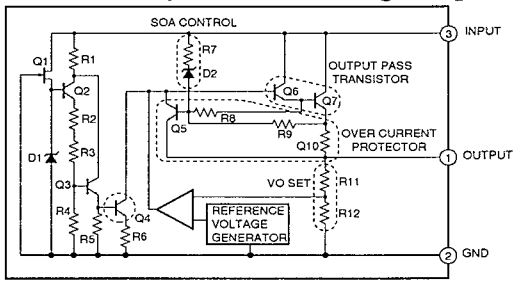
IC245 LC72121M (PLL Synthesizer)



IC458 M62428FP (Audio Sound Control)


CLK DVDD AVDD OUT2 INBB2 NFBB2 FBB2 VOL IN2 TONE OUT2 FTRE2 FRAS2 NFBAS2 INBAS2 REC OUT2 IN2D IN2C IN2B IN2A MIC IN VREFO AGND
INTERFACE
DATA LATCH DGND OUT1 INBB1 NFBB1 FBB1 VOL IN1 TONE OUT1 FTRE1 FBAS1 NFBAS1 INBAS1 REC OUT1 IN1D IN1C IN1B IN1A SUR C SUR R VREFI
BB Amp2 FIN Amp2 FIN Amp1 BB Amp1
SW19 SW18 VR2 VR1
TONE Amp2 TONE Amp1
SW17-B SW17-C SW15-B SW15-C SW16-B SW16-C SW14-B SW14-C
BASS Amp2 BASS Amp1
SW13 SW12
MIX Amp2 MIX Amp1
SW9 SW7 SW5 SW3 SW8 SW6 SW4 SW2
Buff Amp2 Buff Amp1
SW11 SW10 SW13
MICAmp ref AVDD refAmp SW1

IC497 NJM7805FA (3-Terminal Voltage Regulator)



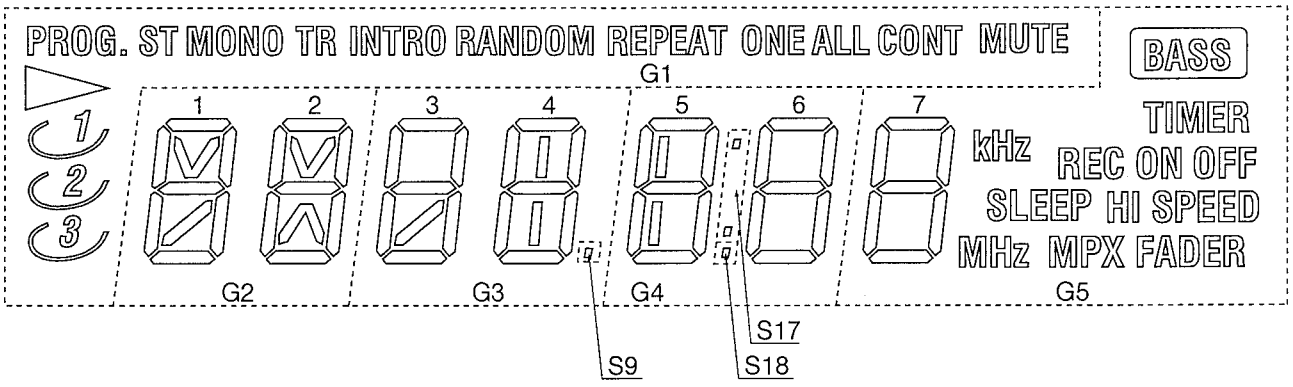
IC BLOCK DIAGRAM & DESCRIPTION

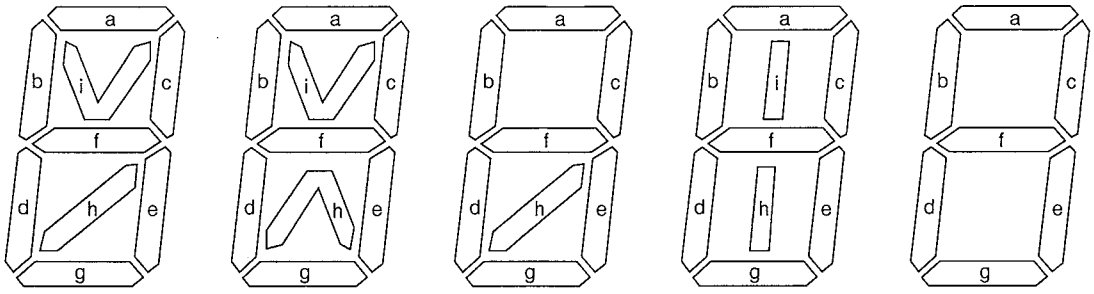
IC601 LC866436 (Micro Processor)

No.	Pin Name	I/O	Function
1	C2F	I	C2F flag (DSP)
2	TU-DI	I	Data input for tuner communication
3	TU-CE	O	CE output for tuner communication
4	CLK-SHIFT	O	Main clock shift
5	SEL-12/24	I	Select clock indication
6	WD	I	Watch dog timer input
7	RESET	I	System reset
8	XT1		Sub clock oscillation terminal
9	XT2		Sub clock oscillation terminal
10	VSS		GND
11	CF1		Main clock oscillation ceramic terminal
12	CF2		Main clock oscillation ceramic terminal
13	VCC		Power supply (+)
14	KEY0	A/D	Key input
15	KEY1	A/D	Key input
16	TAPE-SEL	A/D	Switch input (REC-SW, PLAY-SW)
17	SW0	A/D	Switch input (LIMIT, OPEN)
18	SW1	A/D	Switch input (EXTRA, HOME)
19	SW2	A/D	Switch input (C-No.)
20	SW3	A/D	Switch input (FORWARD, REVERSE)
21	V-CHK	I	Voltage check, failure
22	WRQ	I	CD-DSP interface (SubQ request signal)
23	PROTECTOR	I	Set protector (Unusualness = High)
24	IR	I	Remote control input
25	G5	O	VFD digit output
26	G4	O	VFD digit output
27	G3	O	VFD digit output
28	G2	O	VFD digit output
29	G1	O	VFD digit output
30	S18	O	VFD segment output
31	S17	O	VFD segment output
32	S16	O	VFD segment output
33	S15	O	VFD segment output
34	S14	O	VFD segment output
35	S13	O	VFD segment output
36	S12	O	VFD segment output
37	S11	O	VFD segment output
38	S10	O	VFD segment output
39	S9	O	VFD segment output
40	S8	O	VFD segment output

No.	Pin Name	I/O	Function
41	VCC	-	Power supply (+)
42	VP	-	
43	S7	O	VFD segment output
44	S6	O	VFD segment output
45	S5	O	VFD segment output
46	S4	O	VFD segment output
47	S3	O	VFD segment output
48	S2	O	VFD segment output
49	S1	O	VFD segment output
50	NC	O	Not used
51	SOUND4	O	Sound4 (CLASSIC) LED
52	SOUND3	O	Sound3 (JAZZ) LED
53	SOUND2	O	Sound2 (ROCK) LED
54	SOUND1	O	Sound1 (POPS) LED
55	DISC3	O	Disc3 LED
56	DISC2	O	Disc2 LED
57	DISC1	O	Disc1 LED
58	NC	O	Not used
59	SERVICE	I	PWB check mode
60	BEAT	O	Beat cancel control signal
61	PLL-UP	O	Pull up power supply output
62	SRS-SW	O	SRS-SOUND control output
63	P-CON	O	Power control signal
64	LATCH	O	Latch output for Vol/Func IC(M62428FP)
65	D-OUT	O	Serial data output for Tu, Vol/Func IC
66	D-CLK	O	Serial clock output for Tu, Vol/Func IC
67	MUTE	O	Main mute output
68	PRE-MUTE	O	Pre mute output
69	CARRIAGE+	O	CARRIAGE-MOTOR control output +
70	CARRIAGE-	O	CARRIAGE-MOTOR control output -
71	DRAWER+	O	DRAWER control output +
72	DRAWER-	O	DRAWER control output -
73	VSS	-	VSS
74	COIN	O	CD-DSP interface(Command data output)
75	SQOUT	I	CD-DSP interface(SubQ data input)
76	CQCK	O	CD-DSP interface (Clock)
77	VD-GND	O	GND control output for microcomputer power supply check
78	DRF	I	DRF signal
79	RWC	O	CD-DSP interface(Command latch)
80	DSP-RESET	O	Reset signal to DSP (CD)

FL DISPLAY DESCRIPTION





G2(1,2) G3(3) G3,G4(4,5) G4,G5(6,7)

	G1	G2	G3	G4	G5
S1	MUTE	1a	3a	5a	7a
S2	MONO	1b	3b	5b	7b
S3	ST	1c	3c	5c	7c
S4	CONT	1d	3d	5d	7d
S5	ALL	1e	3e	5e	7e
S6	ONE	1f	3f	5f	7f
S7	REPEAT	1g	3g	5g	7g
S8	RANDOM	1h	3h	5h	kHz
S9	INTRO	1i	S9	5i	MHz
S10	TR	2a	4a	6a	HI SPEED
S11	PROG	2b	4b	6b	FADER
S12	▷	2c	4c	6c	MPX
S13	1	2d	4d	6d	SLEEP
S14	◁1	2e	4e	6e	REC
S15	2	2f	4f	6f	ON
S16	◁2	2g	4g	6g	OFF
S17	3	2h	4h	S17	TIMER
S18	◁3	2i	4i	S18	BASS

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Assignment	F1	F1	NP	NL	G5	G4	G3	G2	G1	S18	S17	S16	S15	S14	S13	S12	S11

Pin No.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Assignment	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	NL	NL	NL	NL	NP	F2	F2

F1, F2 : Filament G1-G5 : Grid S1-S18 : Anode NP : No Pin NL : No Lead

IC & TRANSISTOR VOLTAGES

IC101 LA9240M

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6
STOP	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
PLAY	2.8	2.5	2.5	2.5	2.6	2.5	0	2.4	2.4	2.5	2.5	2.8	2.5	2.7	2.3
STOP	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.3
Pin No.	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
PLAY	2.3	0	0	4.9	0	1.5	0	0	0	0.8	2.4	2.4	2.5	2.5	0
STOP	2.3	0	0	4.9	5.0	4.8	0	4.9	0	0	1.6	2.4	2.4	2.5	0
Pin No.	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
PLAY	2.5	2.5	0	0	2.3	4.5	0	0	4.9	0	5.0	2.5	2.5	2.5	2.6
STOP	2.5	2.5	0	0	2.3	4.8	4.8	0	0	0	5.0	2.5	2.5	0.9	0.9
Pin No.	**61**	**62**	**63**	**64**											
PLAY	2.3	3.9	0	5.0											
STOP	2.2	4.3	0	5.0											

IC102 LC78622N

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	0	0	1.6	0	1.6	5.0	0.3	0	2.5	2.5	0	0.9	0	0	0
STOP	0	0	0	0	1.6	5.0	0	0	2.5	2.4	0	0	0	4.9	0
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
PLAY	1.7	0	5.0	0	0	2.4	5.0	5.0	4.9	1.5	0	0	1.8	0	0
STOP	4.9	4.9	4.9	0	0	2.4	0	4.9	4.8	2.4	0	0	2.4	0	4.9
Pin No.	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
PLAY	2.4	0	0	0	0	5.2	2.1	0	0	2.1	5.2	0	5.0	2.0	2.0
STOP	2.4	0	0	0	4.9	5.2	2.1	0	0	2.1	5.2	4.9	4.9	2.0	2.0
Pin No.	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
PLAY	0	0.1	0	0.1	0	0.9	2.5	0.9	0	0	0	4.5	4.8	0	2.2
STOP	0	0.1	2.2	0	2.5	1.3	2.5	0	0	0	4.8	4.8	4.8	0	2.1
Pin No.	**61**	**62**	**63**	**64**											
PLAY	2.2	0	0	0											
STOP	2.2	0	0	0											

IC103 LA6541

(V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY	8.3	0	2.7	2.5	4.1	3.5	3.5	4.1	2.5	2.7	5.0	7.7	5.0	5.0	2.6
STOP	8.6	4.8	2.5	2.5	2.5	3.9	3.8	4.0	2.5	2.5	5.0	7.8	5.0	5.0	2.5
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**						
PLAY	6.3	3.8	3.9	3.8	3.9	2.5	2.5	2.5	8.4						
STOP	2.5	3.9	3.9	3.9	3.8	2.5	2.5	2.5	8.4						

IC131 TA7291S

(V)

Pin No.	1	2	3	4	5	6	7	8	9						
DR-OPEN	4.8	11.5	7.4	0	0	11.0	0.7	6.7	0						
DR-CLOSE	0	11.5	0.7	0	0	11.0	7.4	6.7	4.8						
STOP	4.8	11.5	0.6	0	0	11.4	0.6	6.7	4.8						

IC132 TA7291S

(V)

Pin No.	1	2	3	4	5	6	7	8	9						
CA-OPEN	0	11.5	0.7	0	0	11.0	6.3	5.6	4.8						
CA-CLOSE	4.8	11.5	6.3	0	0	11.0	0.7	5.6	0						
STOP	4.8	11.5	0.6	0	0	11.4	0.6	5.6	4.8						

IC & TRANSISTOR VOLTAGES

IC601 LC866436 (V)

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
PLAY (DISC1)	*0.3*	*5.0*	*0*	*0*	*0*	*0*	*4.9*	*1.3*	*2.7*	*0*	*2.3*	*2.6*	*4.8*	*4.8*	*4.8*
STOP	*4.9*	*5.0*	*0*	*0*	*0*	*0*	*4.9*	*1.3*	*2.7*	*0*	*2.3*	*2.6*	*4.8*	*4.8*	*4.8*
Pin No.	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
PLAY (DISC1)	*4.8*	*3.5*	*2.4*	*3.5*	*2.4*	*4.6*	*-*	*0*	*4.8*	*-*	*-*	*-*	*-*	*-*	*-*
STOP	*4.8*	*3.5*	*2.4*	*3.5*	*2.4*	*4.6*	*0*	*0*	*4.8*	*-*	*-*	*-*	*-*	*-*	*-*
Pin No.	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
PLAY (DISC1)	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*4.8*	*-22.6*	*-*	*-*	*-*
STOP	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*4.8*	*-22.6*	*-*	*-*	*-*
Pin No.	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
PLAY (DISC1)	*-*	*-*	*-*	*-*	*0*	*0*	*0*	*0*	*4.8*	*0*	*0*	*-*	*0*	*0*	*0*
STOP	*-*	*-*	*-*	*-*	*0*	*0*	*0*	*0*	*4.8*	*4.8*	*4.8*	*4.7*	*0*	*0*	*0*
Pin No.	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**
PLAY (DISC1)	*4.8*	*0*	*4.8*	*0*	*0*	*0*	*0*	*0*	*4.8*	*4.8*	*4.8*	*4.8*	*0*	*0*	*0*
STOP	*4.8*	*0*	*4.8*	*0*	*0*	*0*	*4.8*	*4.8*	*4.8*	*4.8*	*4.8*	*4.8*	*0*	*4.8*	*0*
Pin No.	**76**	**77**	**78**	**79**	**80**										
PLAY (DISC1)	*4.6*	*4.8*	*4.9*	*0*	*4.8*										
STOP	*4.8*	*4.8*	*0*	*0*	*4.8*										

TRANSISTORS

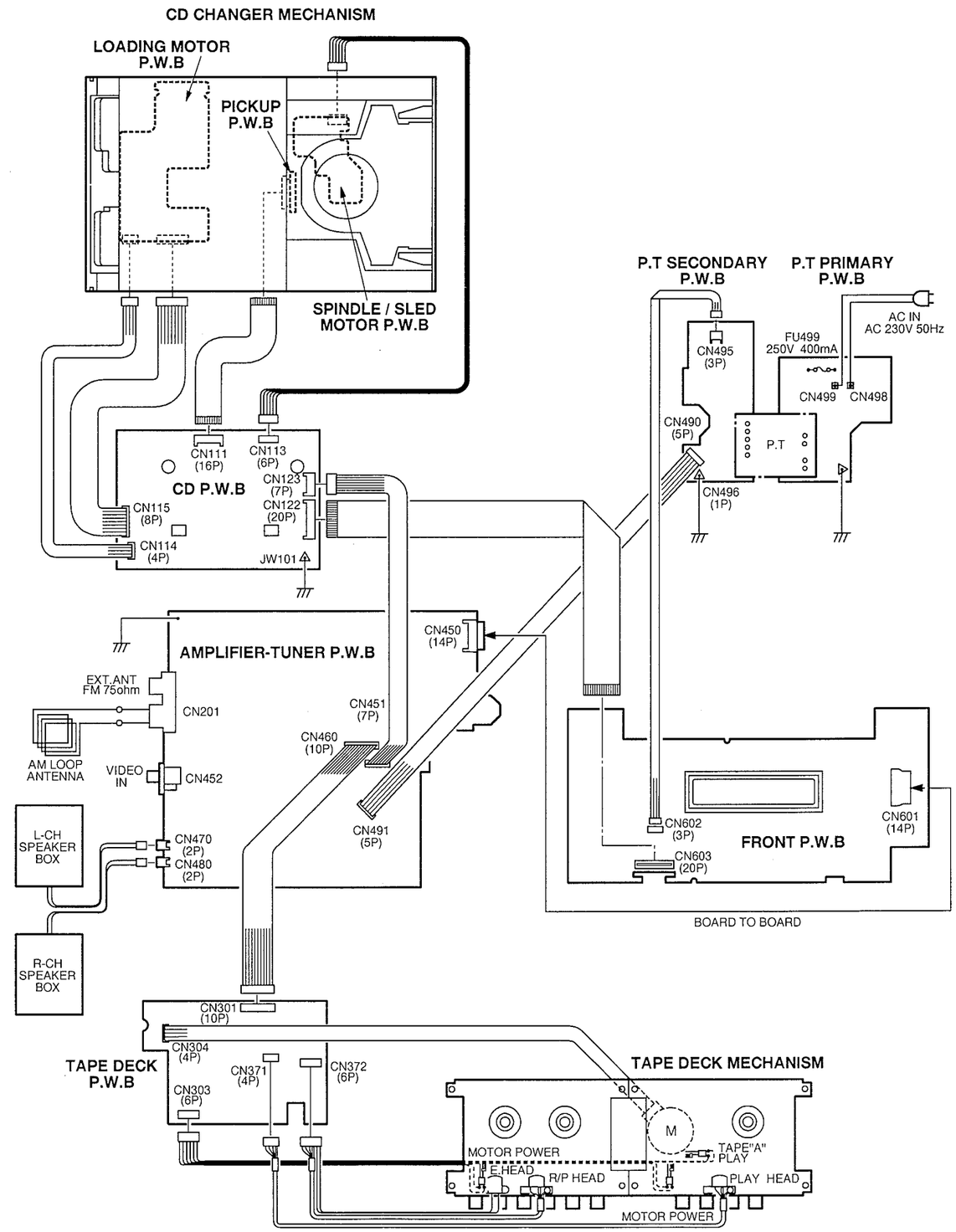
PIN NAME	Q1301			Q1401		
	B	C	E	B	C	E
PLAY	*4.5*	*1.9*	*3.9*	*8.2*	*5.0*	*5.0*
STOP	*4.9*	*1.6*	*4.3*	*8.3*	*5.0*	*7.7*

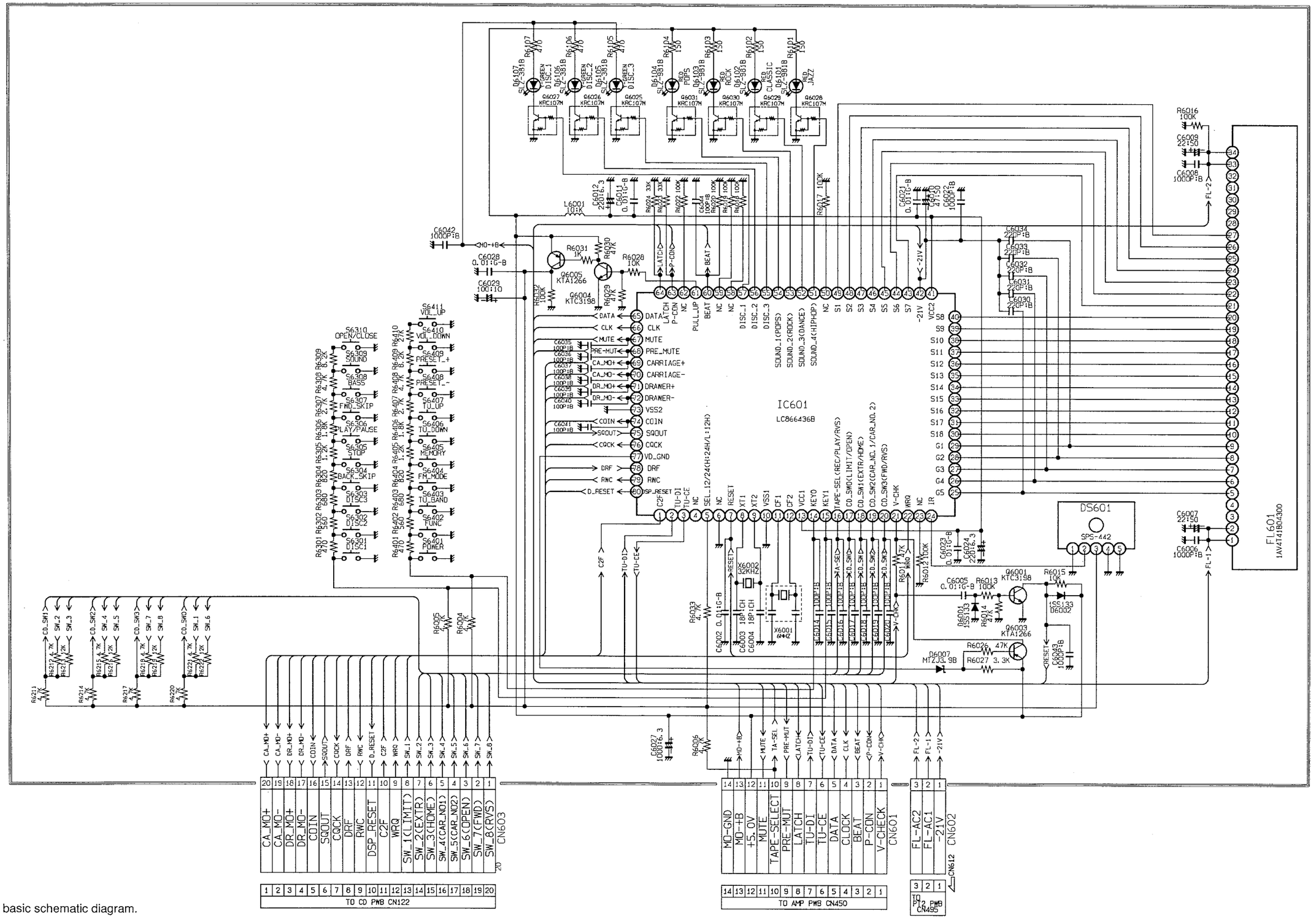
PIN NAME	Q6001			Q6003			Q6004			Q6005			Q6025			Q6026		
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
POWER ON	*0.0*	*0.0*	*4.9*	*4.9*	*4.9*	*4.6*	*0.7*	*0.0*	*0.0*	*4.1*	*4.9*	*4.9*	*4.8*	*0.0*	*0.0*	*4.8*	*0.0*	*0.0*
POWER OFF	*0.0*	*0.0*	*5.0*	*5.0*	*5.0*	*4.6*	*0.7*	*0.0*	*0.0*	*4.2*	*5.0*	*5.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*

PIN NAME	Q6027			Q6028			Q6029			Q6030			Q6031		
	B	C	E	B	C	E	B	C	E	B	C	E	B	C	E
POWER ON	*4.8*	*0.0*	*0.0*	*0.0*	*0.0*	*3.6*	*0.0*	*0.0*	*3.6*	*0.0*	*0.0*	*3.6*	*4.8*	*0.0*	*0.0*
POWER OFF	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*3.6*	*0.0*	*0.0*	*3.6*	*0.0*	*0.0*	*3.6*	*0.0*	*0.0*	*3.6*

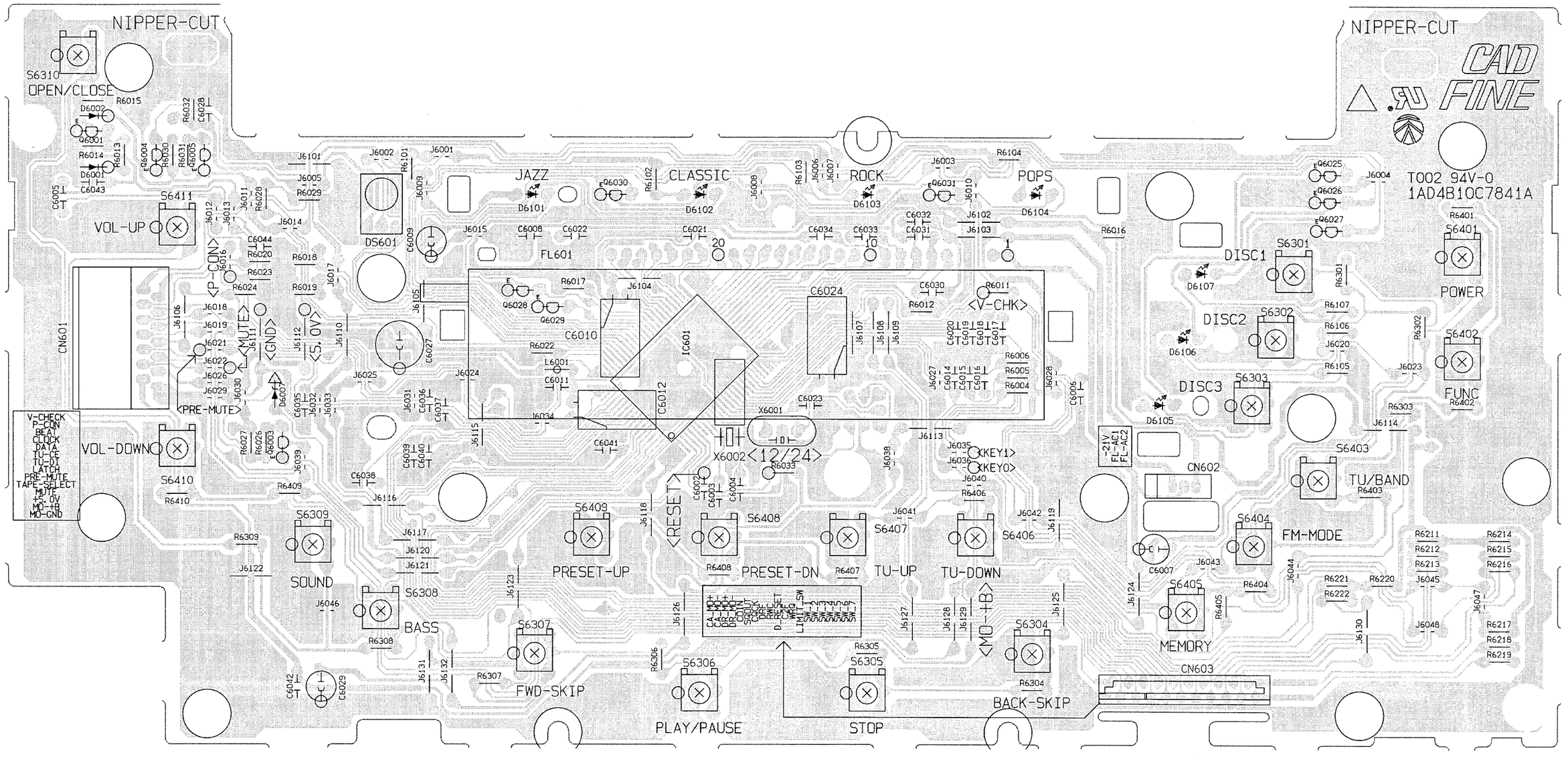
BASS : ON
SOUND : POP

WIRING CONNECTION

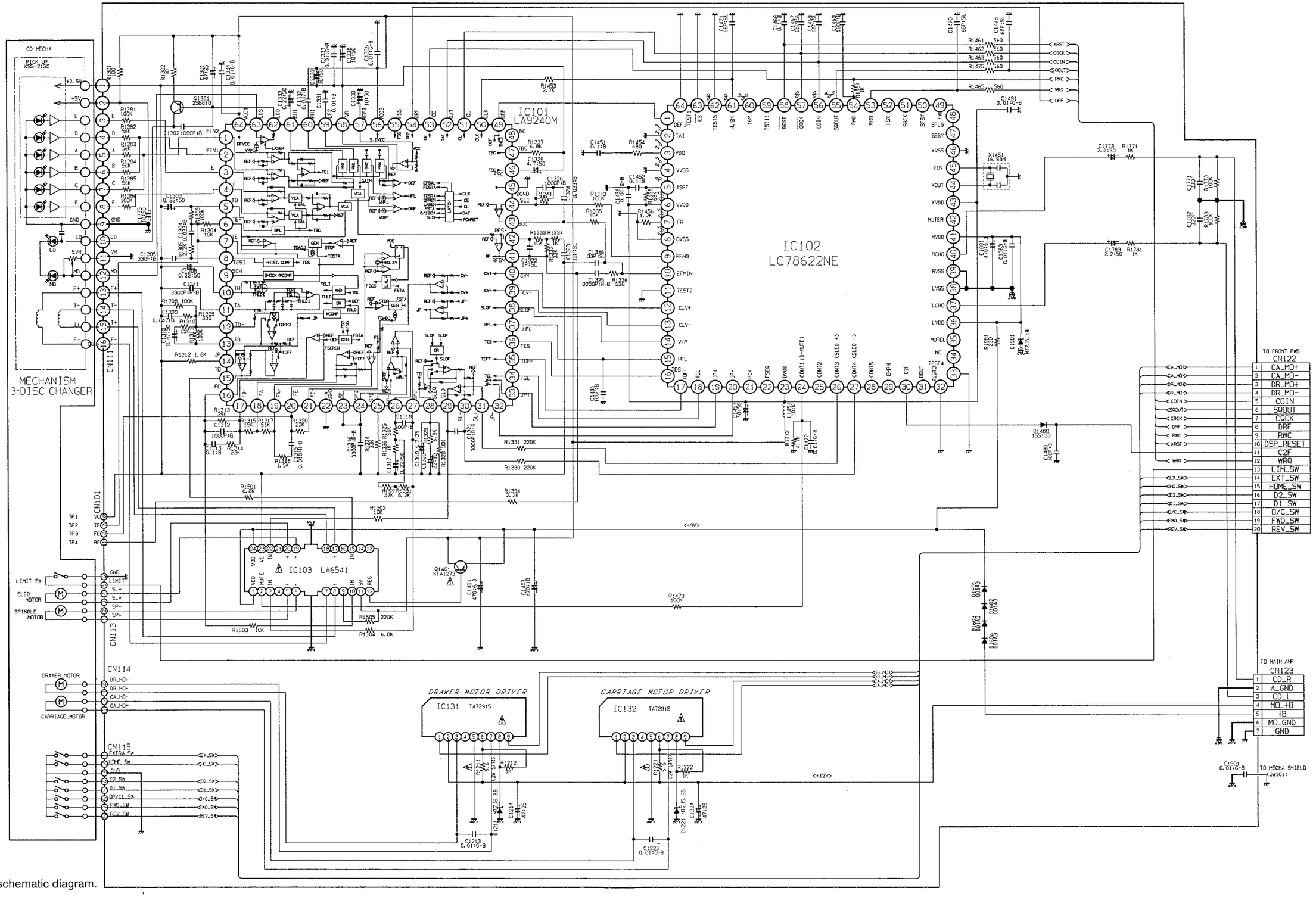




This is a basic schematic diagram.

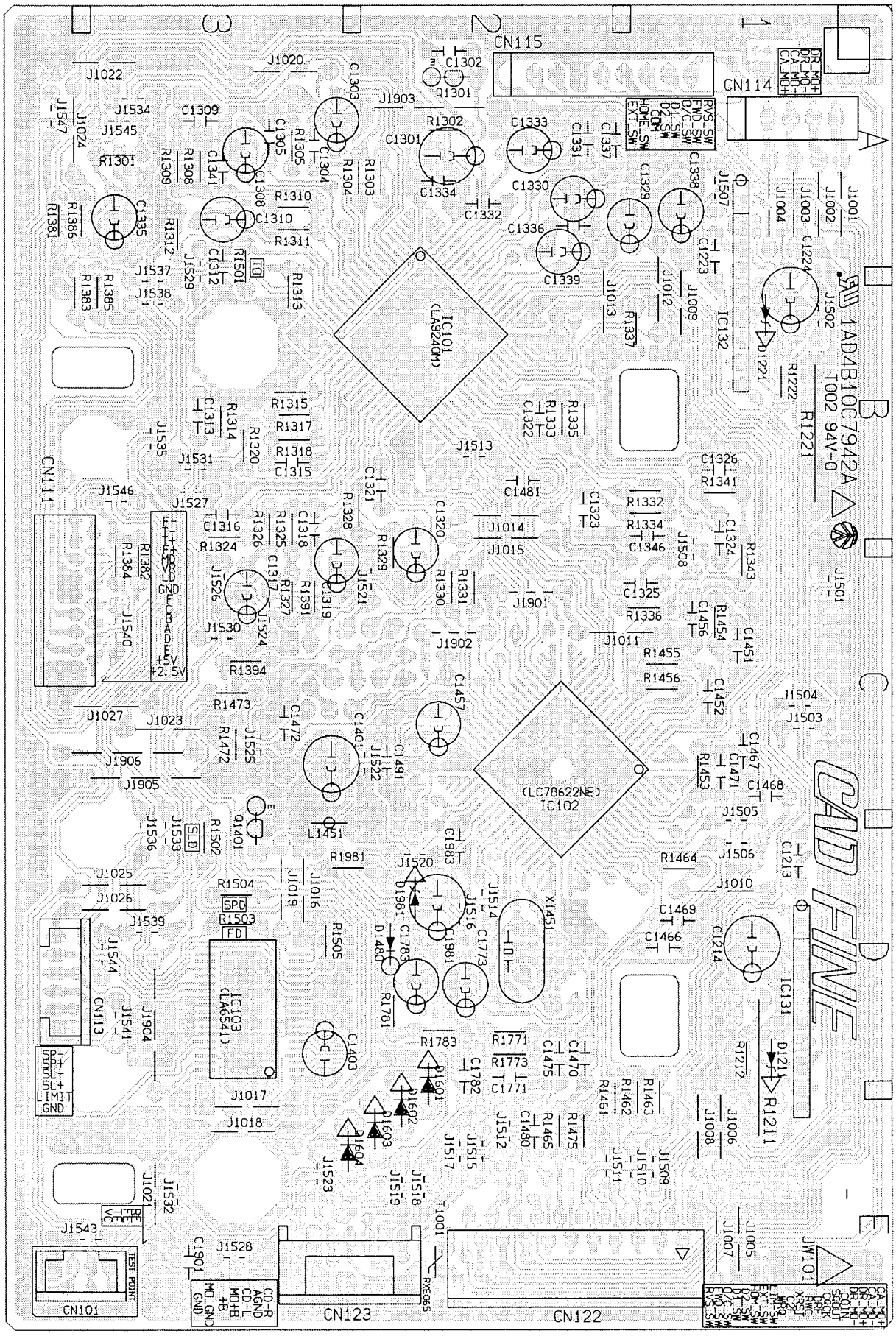

NIPPER-CUT
S6310
OPEN/CLOSE
VOL-UP
S6411
VOL-DOWN
S6410
SOUND
S6309
BASS
S6308
FWD-SKIP
S6307
PRESET-UP
S6409
PRESET-DN
S6408
PLAY/PAUSE
S6306
STOP
S6305
TU-UP
S6407
TU-DOWN
S6406
BACK-SKIP
S6304
DISC1
S6301
DISC2
S6302
DISC3
S6303
POWER
S6401
FUNC
S6402
TU/BAND
S6403
FM-MODE
S6404
MEMORY
S6405
JAZZ
CLASSIC
ROCK
POPS
DS601
FL601
IC601
X6001
X6002 <12/24>
CN601
CN602
CN603
<P-CON>
<MUTE>
<GND>
<PRE-MUTE>
<5.0V>
<RESET>
<V-CHK>
<MO-+B>
<KEY1>
<KEY0>
-21V FL-AC1 FL-AC2
V-CHECK
P-CON
BEAT
CLOCK
DATA
TU-CE
TU-DI
LATCH
PRE-MUTE
TAPE-SELECT
MUTE
+5.0V
MO-+B
MO-GND
CAD FINE
T002 94V-0
1AD4B10C7841A

SCHEMATIC DIAGRAM (CD)

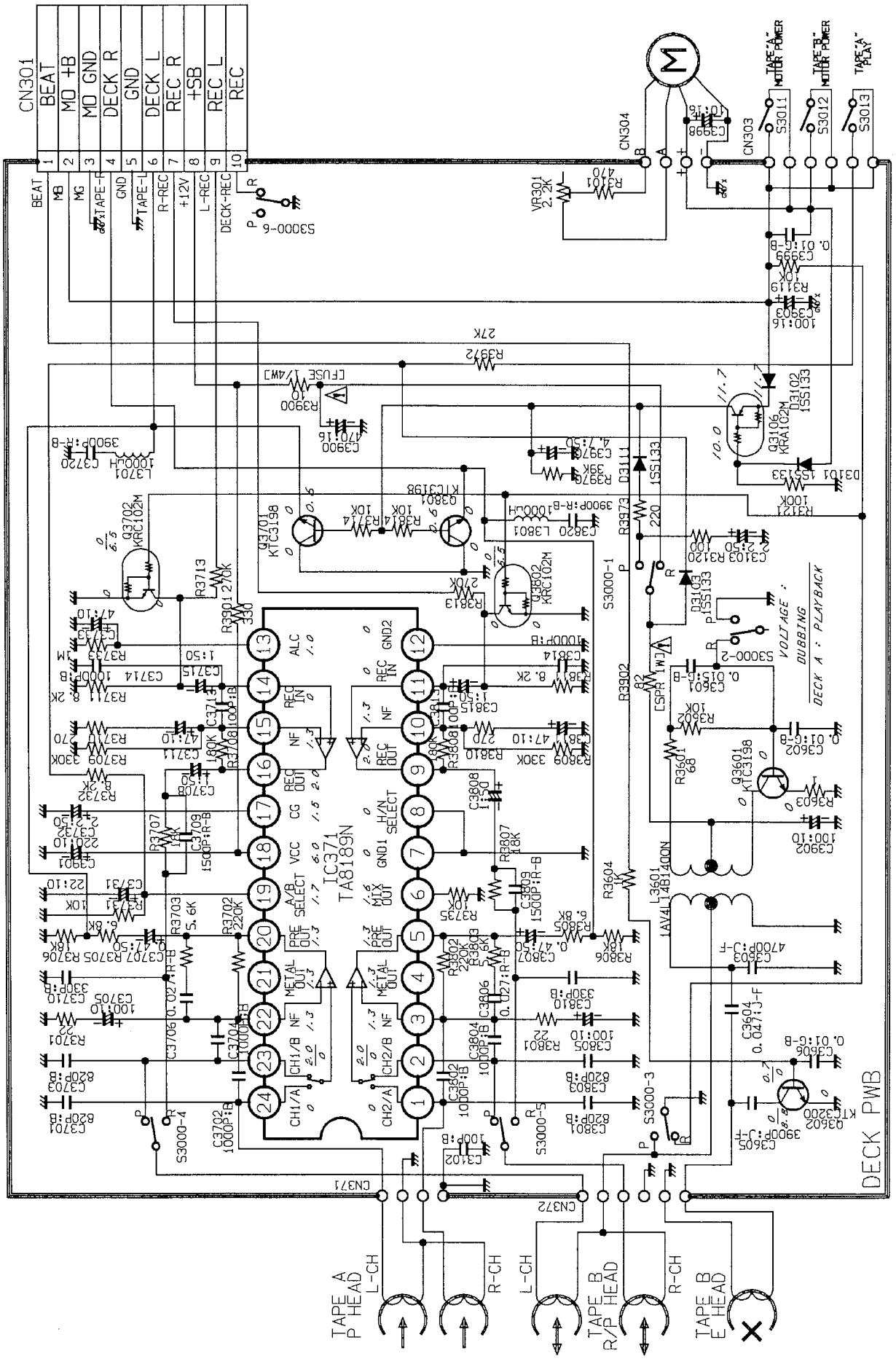


This is a basic schematic diagram.

WIRING DIAGRAM (CD)

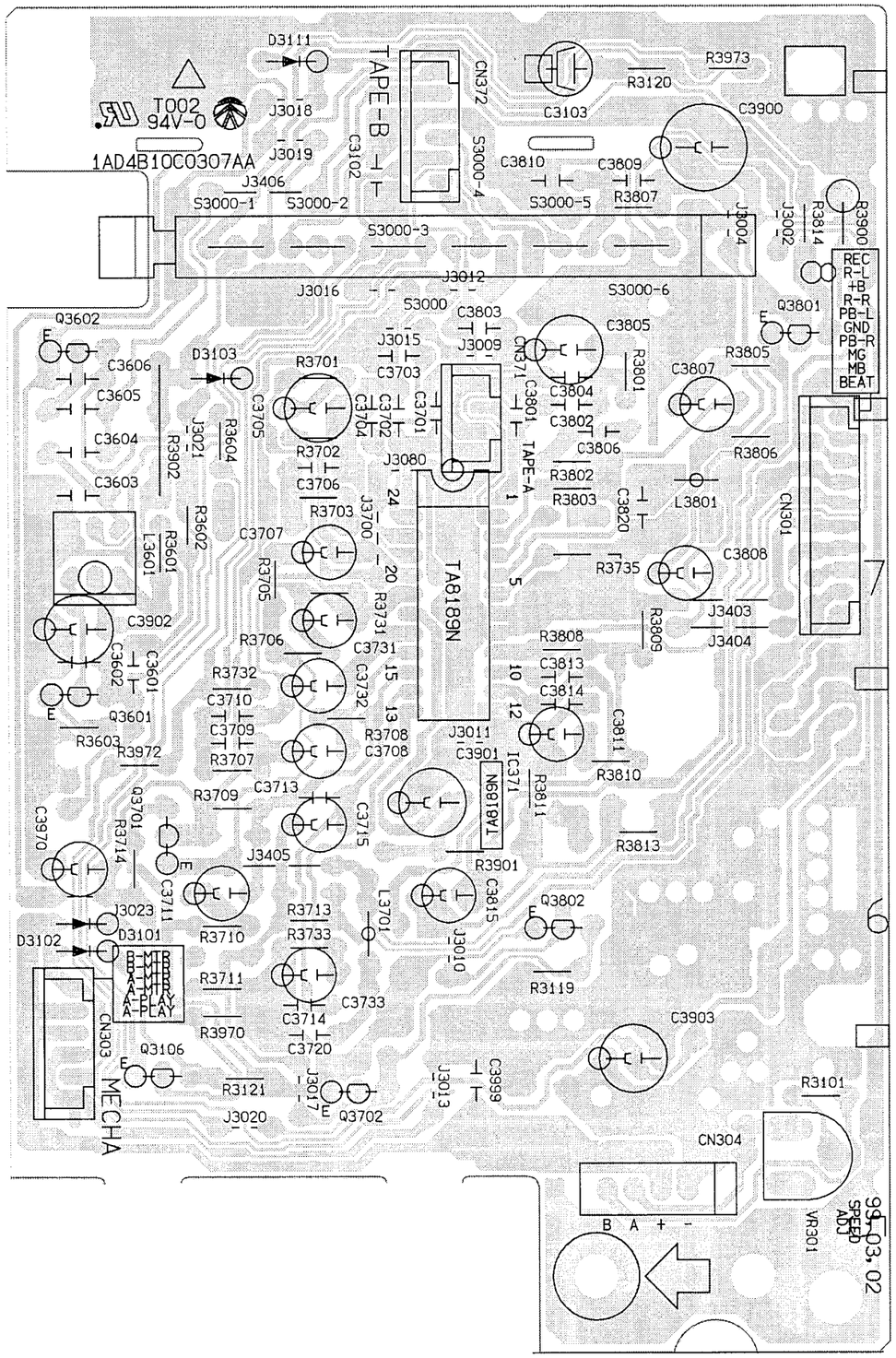


SCHEMATIC DIAGRAM (DECK)



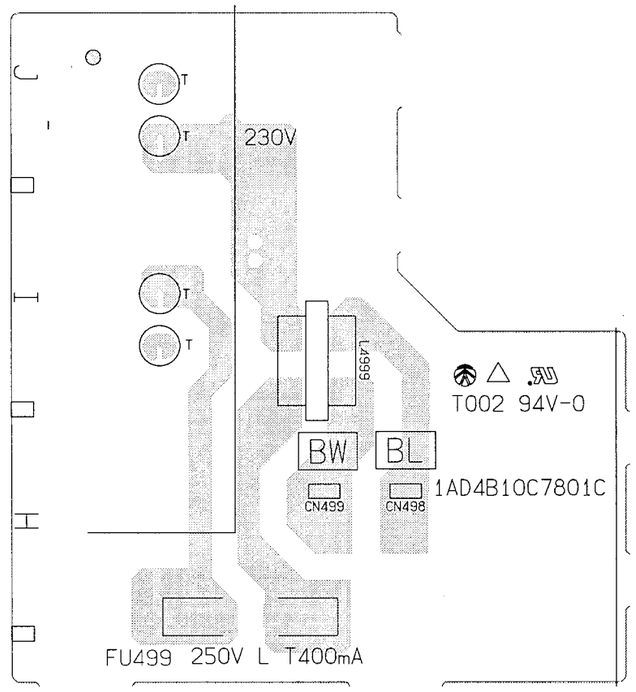
This is a basic schematic diagram.

WIRING DIAGRAM (DECK)

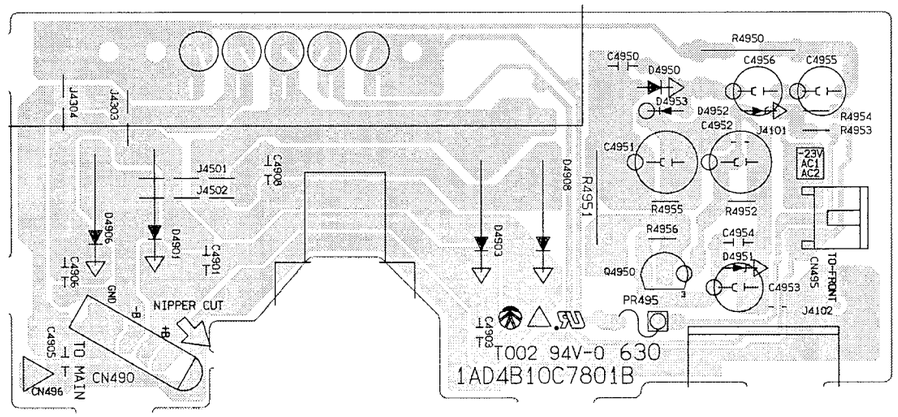


WIRING DIAGRAM (POWER TRANSFORMER)

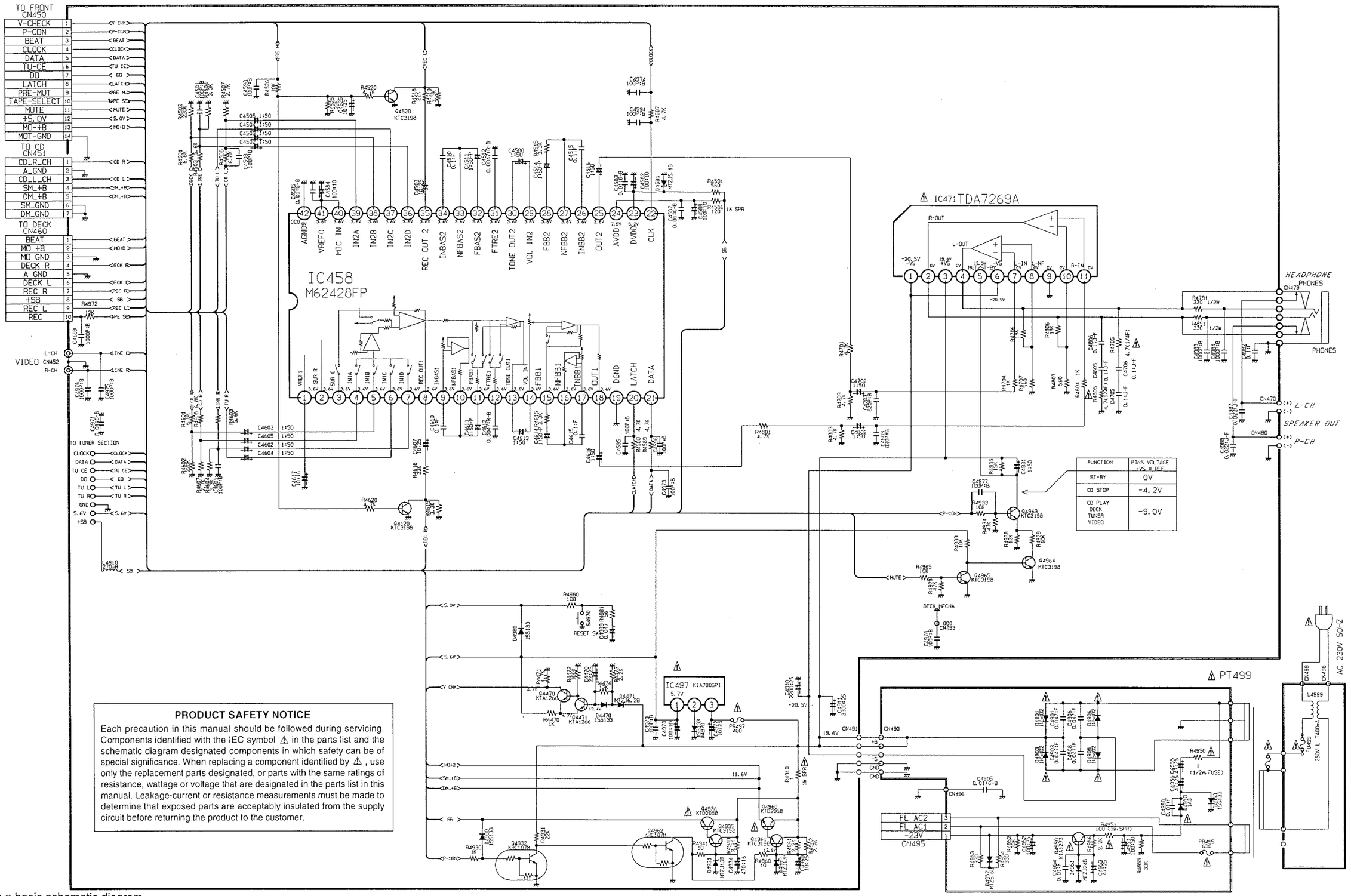
POWER TRANSFORMER, PRIMARY P.W.B



POWER TRANSFORMER, SECONDARY P.W.B



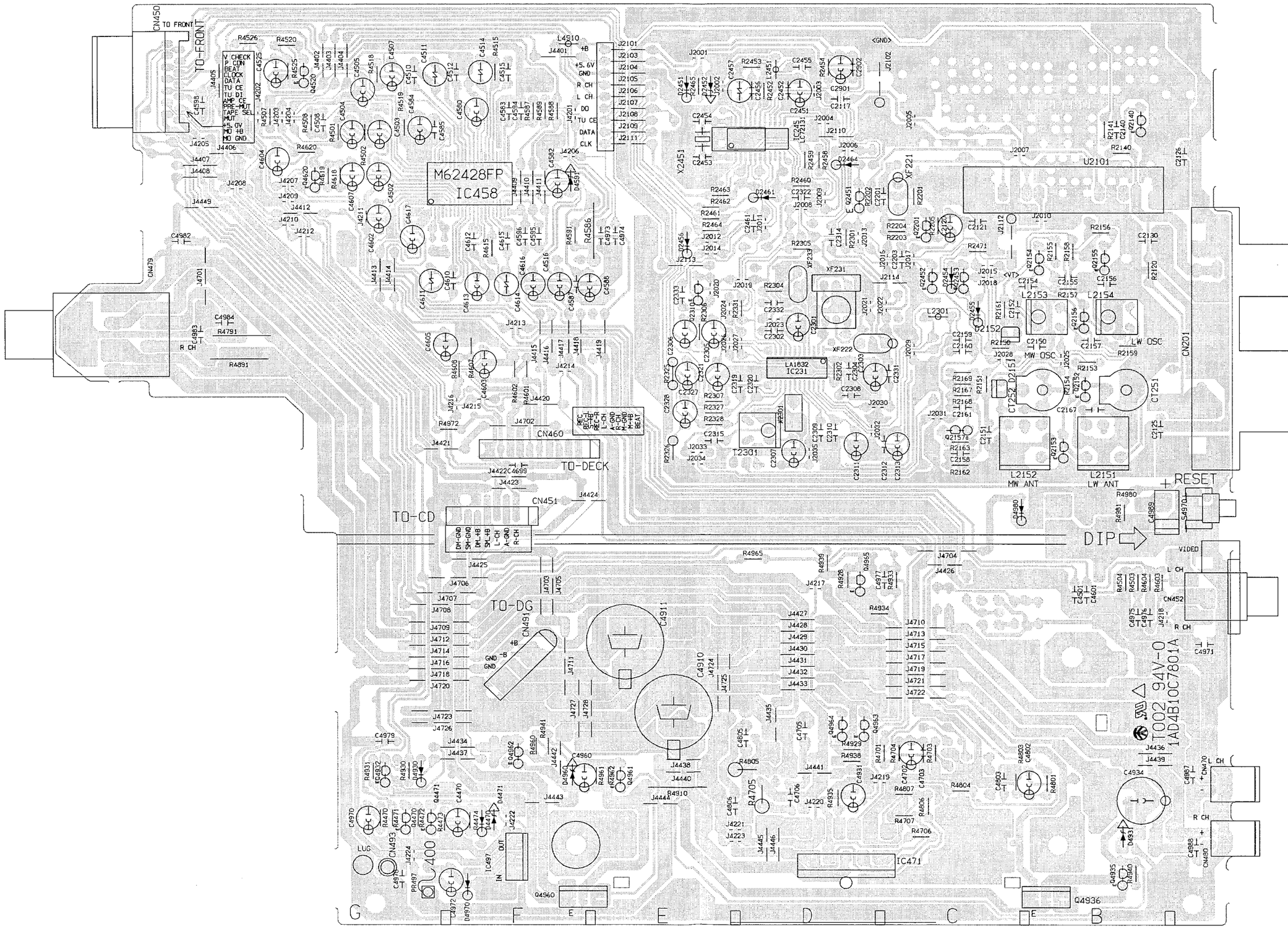
SCHEMATIC DIAGRAM (AMPLIFIER)



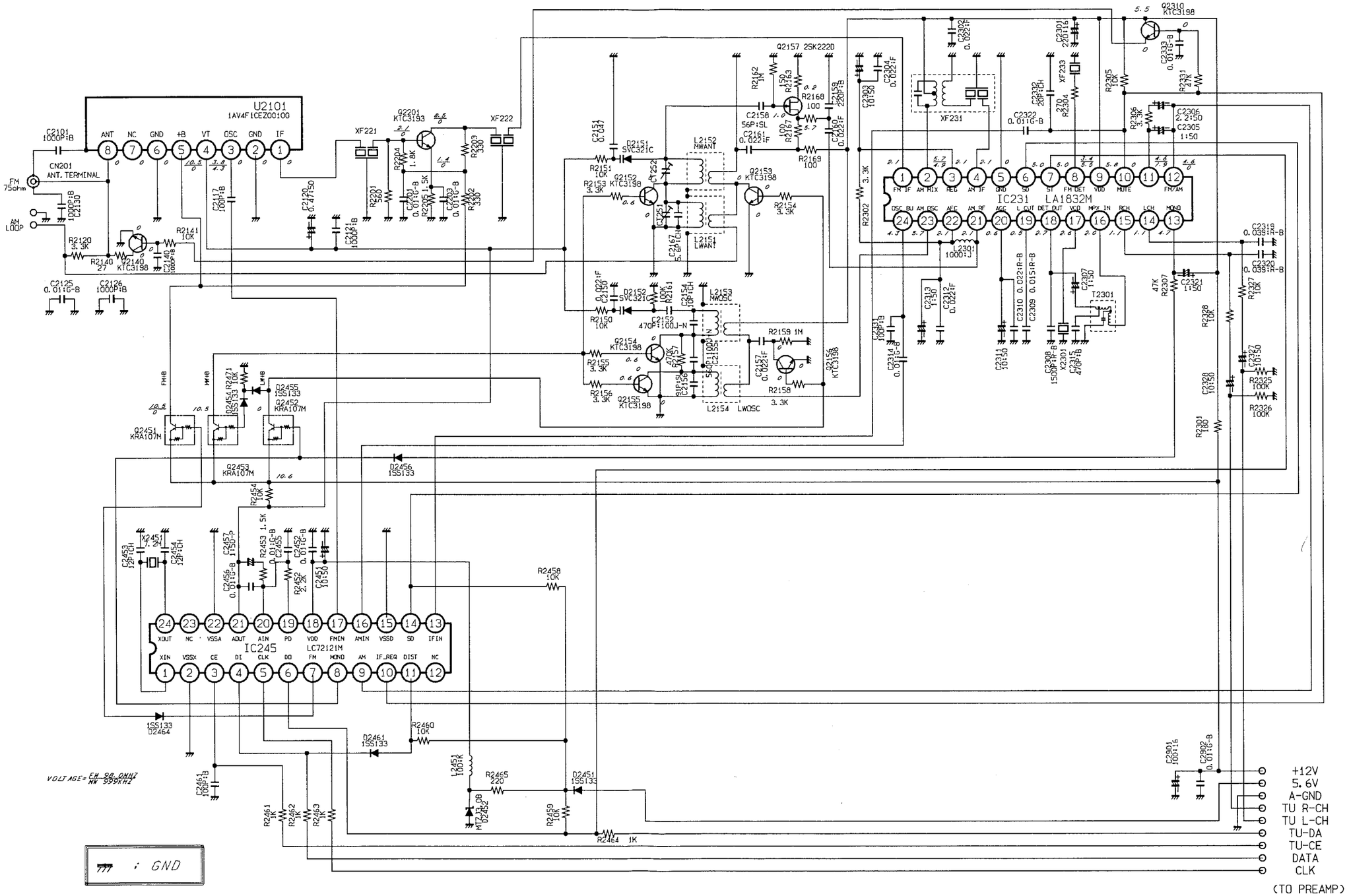
PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designated components in which safety can be of special significance. When replacing a component identified by ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

This is a basic schematic diagram.


CN450
TO FRONT
TO-FRONT
V CHECK
P CON
BEAT
CLOCK
DATA
TU CE
TU DI
AM CE
PRE OUT
APE SEL
MUT
+5.6V
+B
GND
M62428FP
IC458
CN479
R CH
L4510
+B
+5.6V
GND
R CH
L CH
DO
TU CE
DATA
CLK
<GND>
U2101
XF221
XF231
XF222
LA1832
IC231
T2301
L2153
L2154
L2150
L2152
MW ANT
L2151
LW ANT
MW OSC
LW OSC
CN201
RESET
DIP
VIDEO
CN452
R CH
L CH
CN460
TO-DECK
CN451
TO-CD
DM-GND
SM-GND
DM-+B
SM-+B
L-CH
A-GND
R-CH
CN491
TO-DG
GND
GND
+B
-B
L400
LUG
CN493
IC497
IN
OUT
IC471
Q4960
Q4936
T002 94V-0
1AD4B10C7801A
G
F
E
D
C
B

SCHEMATIC DIAGRAM (TUNER)



This is a basic schematic diagram.

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SANYO Technosound Co., Ltd.
Osaka, Japan

SANYO

FILE NO.

Mechanism Manual 3CD Changer Mechanism PM-CDC10TP

This manual explain how to remove and assemble by 10 illustration as follows.

May help the service manual of DC-C10, C30, C50, C70 Series.

Note: A name in this explanation uses a name mentioned in mechanism number list.

Operate it in number order.

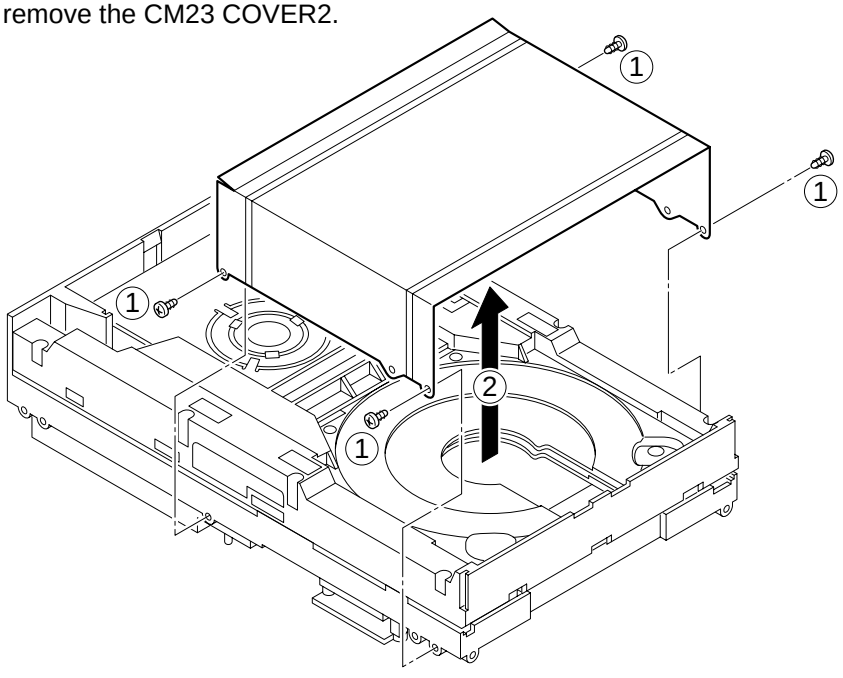
Objet Models as follows

DC-AWM-2200/US	(129 554 00)	DC-C10/US	(129 554 01)	DC-C10/CA	(129 554 02)
DC-C10/PA	(129 554 03)	DC-C10/XE	(129 554 05)	DC-C10/AU	(129 554 06)
DC-AWM-2200/MX	(129 554 07)	DCS-C20/US	(129 554 08)	DC-C10/KR	(129 554 09)
DCS-C40/US	(129 556 00)	DC-C30/CA	(129 556 01)	DC-C30/UK	(129 556 03)
DC-C30/XE	(129 556 04)	DC-C30/AU	(129 556 05)	DC-C30/PA	(129 556 06)
DC-C40/CA	(129 556 07)	DC-C30/KR	(129 556 08)	DCS-C60/US	(129 558 01)
DC-C50/CA	(129 558 01)	DC-C50/UK	(129 558 04)	DC-C50/XE	(129 558 05)
DC-C50/PA	(129 558 06)	DCS-C100/US	(129 560 00)	DC-C70/CA	(129 560 01)
DC-C70/UK	(129 560 03)	DC-C70/XE	(129 560 04)	DC-C70/AU	(129 560 05)
DC-C70/PA	(129 560 06)	DC-007C/UK	(129 569 00)	DC-007C/SS	(129 569 02)
DC-007C/AU	(129 569 03)	DC-007CT/CA	(129 569 04)		

3 CD MECHANISM INSTRUCTION

A. Remove the COVER2

Remove the 4 screws and remove the CM23 COVER2.



REFERENCE No. MM-5810001

3 CD MECHANISM INSTRUCTION

B. Disassembly the DRAWER 2 (Step 1)

1. Slide CM35 SLIDER 1 back and forth(Fig.1).
   Drawer's lock is released.
2. Pull CM02 DRAWER 2 half way out.

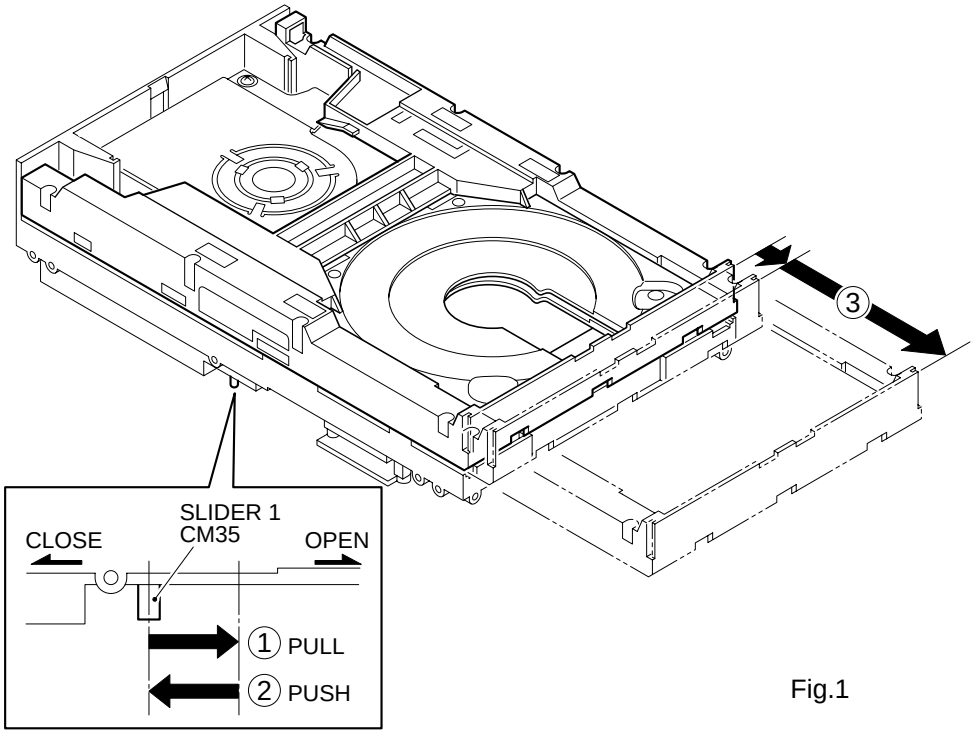


Fig.1

C. Disassembly the DRAWER 2 (Step 2)

1. Push the DRAWER up a little, and push the other side of DRAWER to remove (Fig.2).

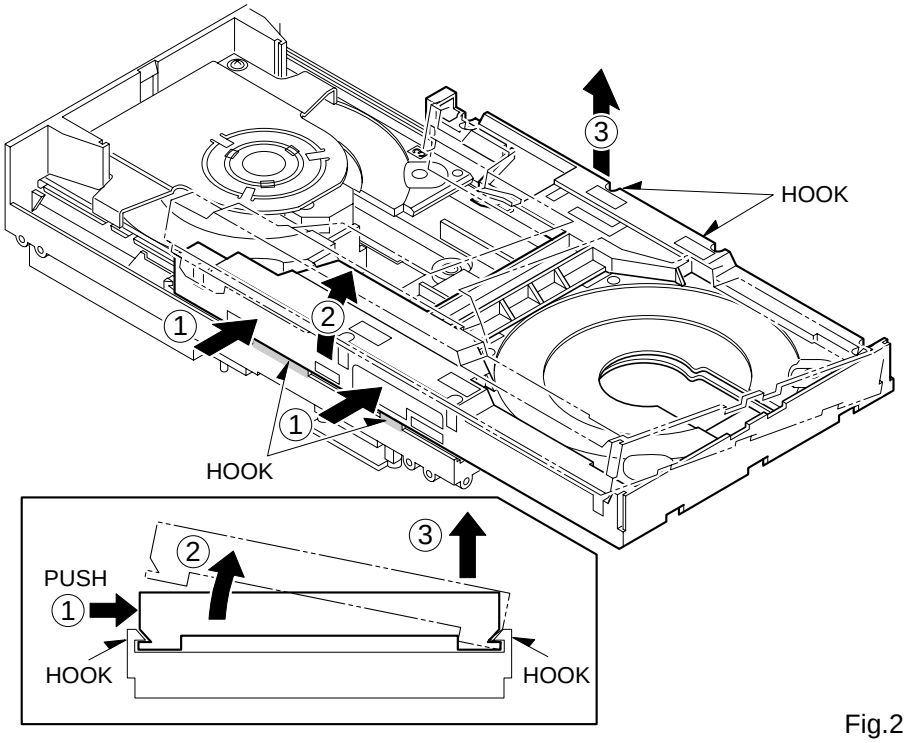


Fig.2

3 CD MECHANISM INSTRUCTION

D. Position confirmation

1. Rotate CM18 BEVEL GEAR 4 to check CM12/CM13 (or CM14) CARRIAGE movement and position.
   If it is good, two carriages are the same position at the end (front position) (Fig.3).

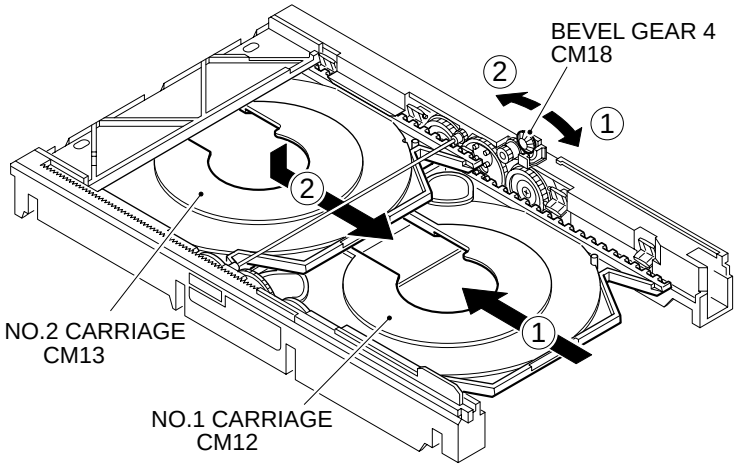


Fig.3

E. If CARRIAGE was slid out of the drawer,

1. Turn CM18 BEVEL GEAR 4 to rotate CM19 CARRIAGE LIFT until it stops once (Fig.4).
2. Place CM13 CARRIAGE No.2 as shown in the illustration (Fig.5).
3. Turn CM18 BEVEL GEAR 4 to slide the carriage into its position.
   Keep rotate until it sopts.

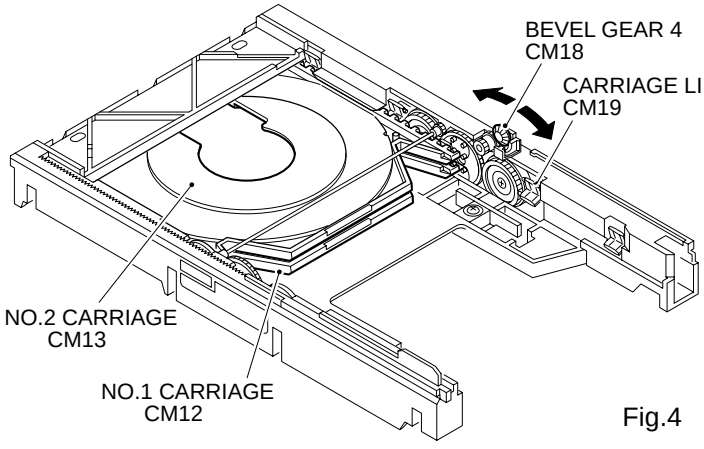


Fig.4

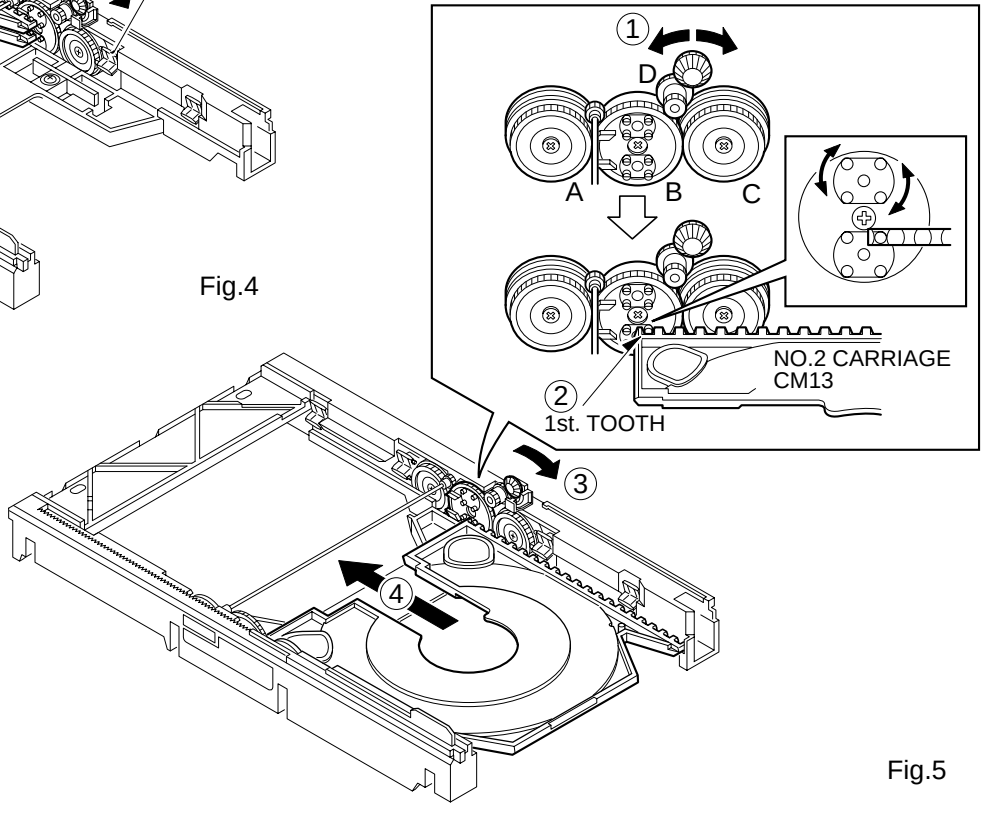


Fig.5

3 CD MECHANISM INSTRUCTION

4. Push CM13 CARRIAGE No.2 up with your fingers (Fig.6).

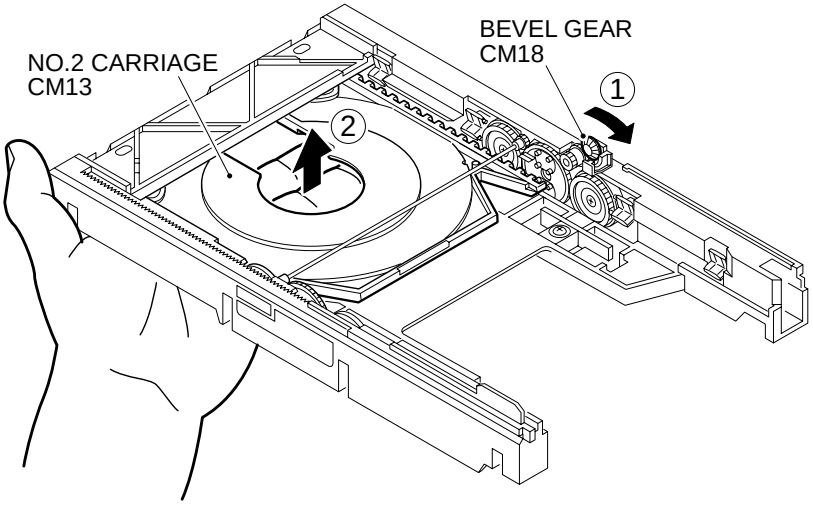


Fig.6

5. Place CM12 CARRIAGE No.1 as shown in the illustration (Fig.7).
6. Turn CM18 BEVEL GEAR 4 to slide the carriage into its position.

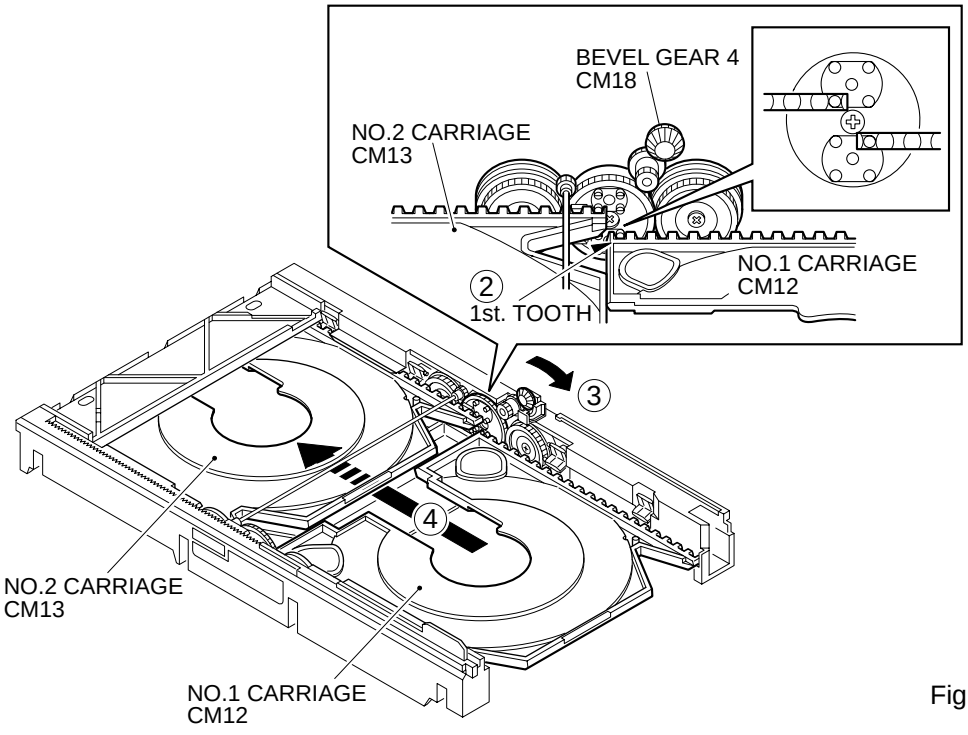


Fig.7

3 CD MECHANISM INSTRUCTION

F. CARRIAGE Playback positon

If the CARRIAGE is wrong position,

1. Slide CM35 SLIDER 1 to lift CM32 CLAMPER up (Fig.8).

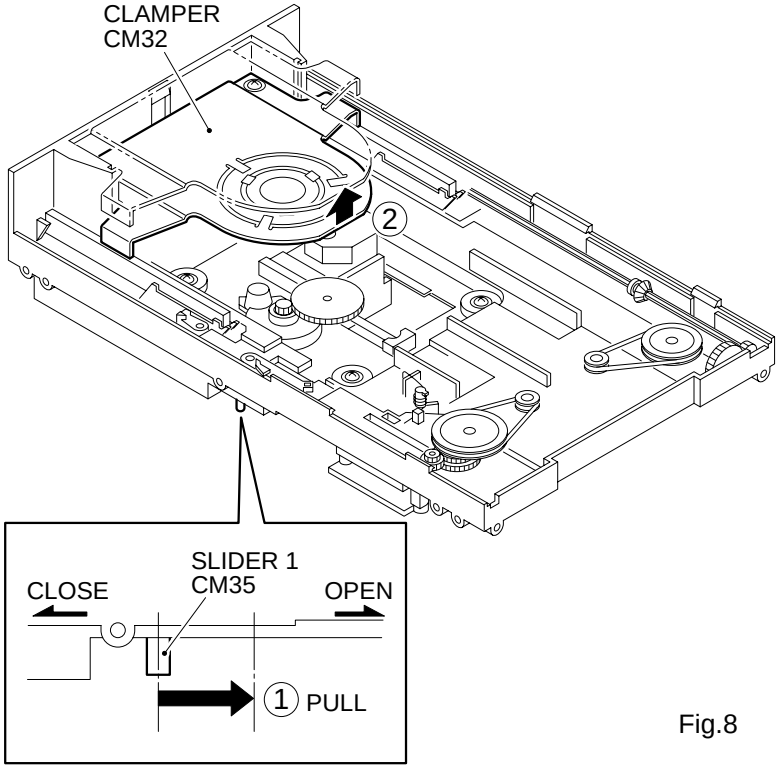


Fig.8

2. Place CM14 CARRIAGE No.3 on CM43 CARRIAGE LIFT UP (Fig.9).
3. Slide CM35 SLIDER 1 back to its original position.

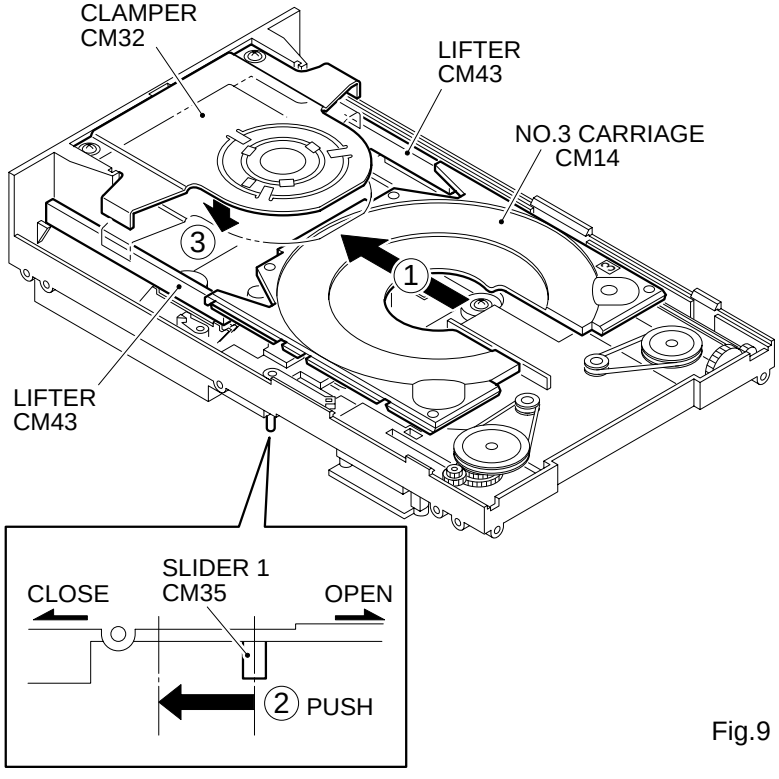
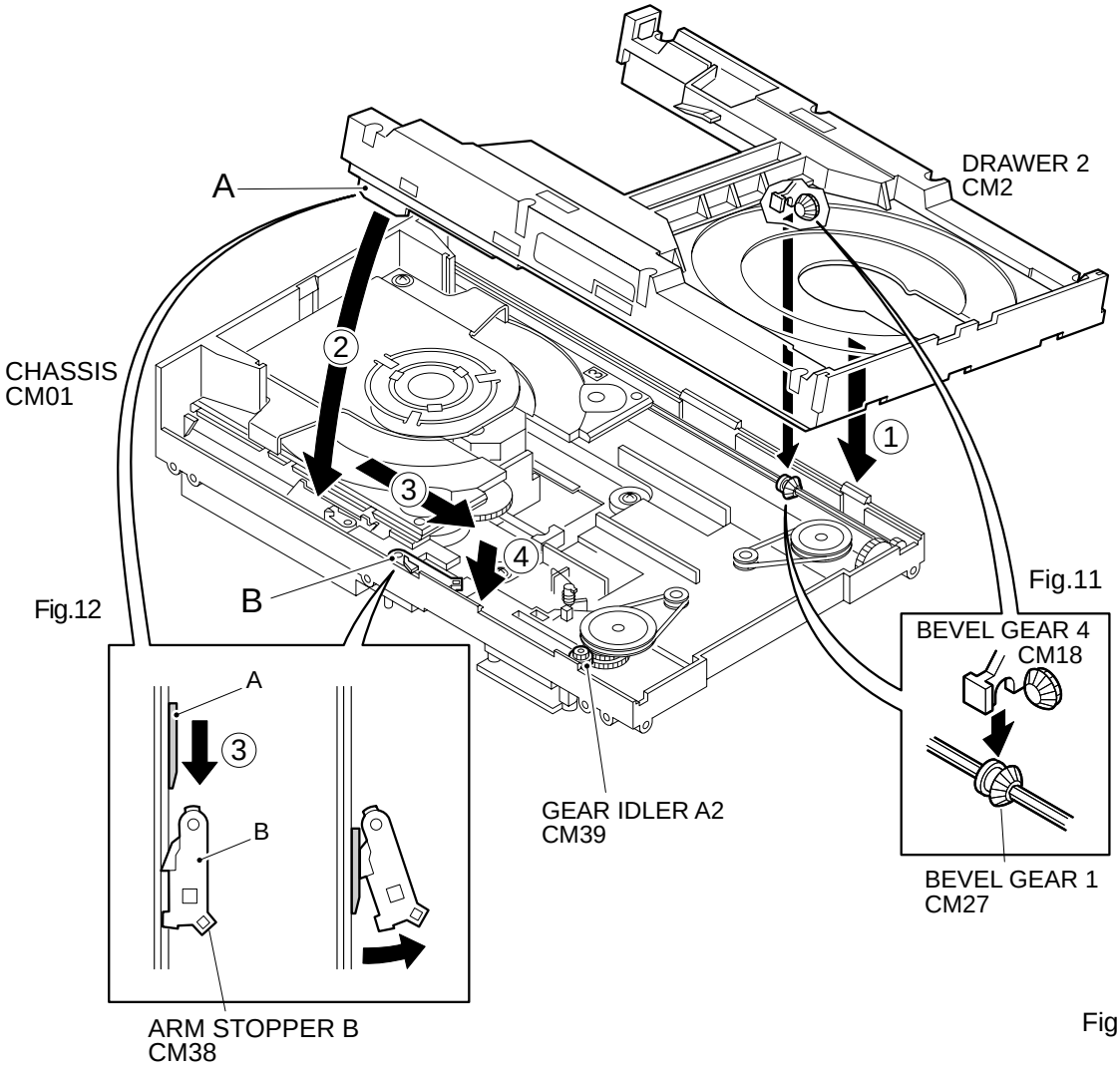


Fig.9

3 CD MECHANISM INSTRUCTION

G.Mechanism Assembly (Fig.10)

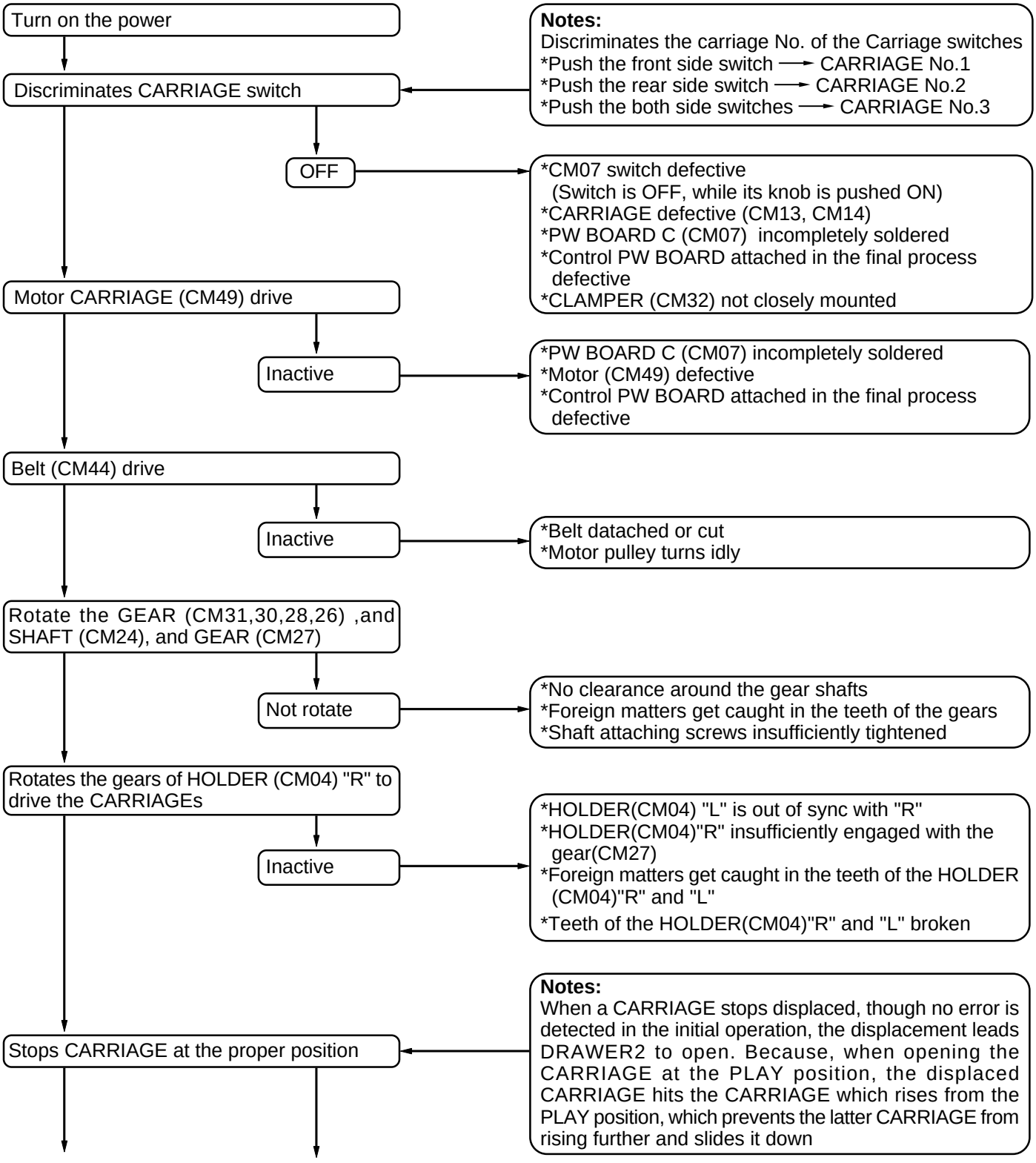
1. Make sure CM18 BEVEL GEAR 4 is in the place.
2. Make sure CM39 GEAR IDLER A2 is in the place.
3. Match CM27 BEVEL GEAR 1 as shown in the illustration (Fig.11).
4. Assemble the right side of CM02 DRAWER 2.
5. Insert Section A and slid it toward front as shown int the illustration (Fig.12).
6. Push it into CM01 ASSY CHASSIS.
7. Push CM02 DRAWER 2 back into the position.
8. Assemble CM23 COVER 2.

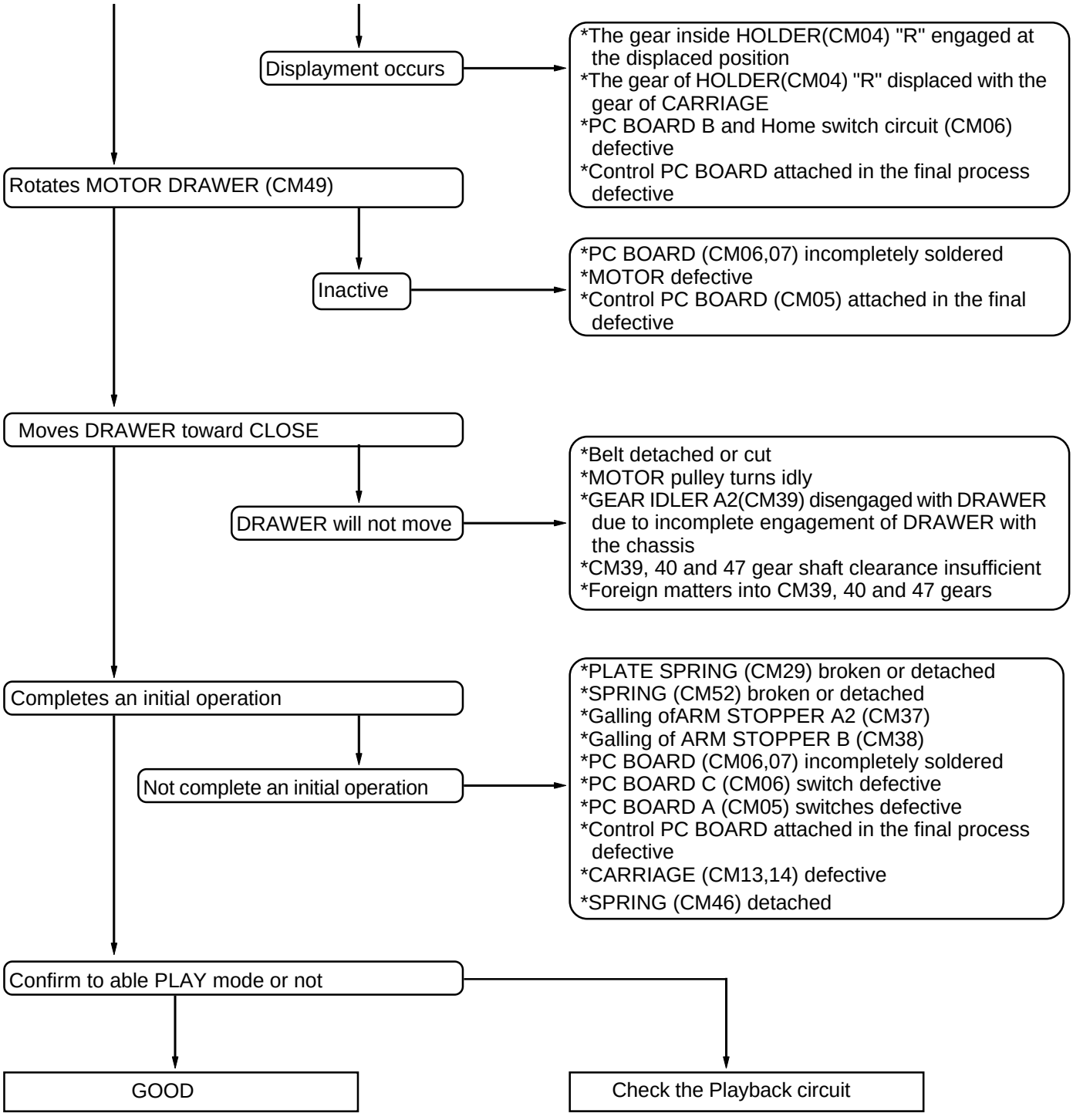


Fig,10

HOW TO CHECK THE UNIT

1. Connect the AC power cord.
2. Press the Power switch to turn on the power.
3. The unit will be set into Initial settings as shown below. If the unit is mulfunction, the unit will stop in the step.


Turn on the power
Discriminates CARRIAGE switch
Notes:
Discriminates the carriage No. of the Carriage switches
*Push the front side switch → CARRIAGE No.1
*Push the rear side switch → CARRIAGE No.2
*Push the both side switches → CARRIAGE No.3
OFF
*CM07 switch defective
(Switch is OFF, while its knob is pushed ON)
*CARRIAGE defective (CM13, CM14)
*PW BOARD C (CM07) incompletely soldered
*Control PW BOARD attached in the final process defective
*CLAMPER (CM32) not closely mounted
Motor CARRIAGE (CM49) drive
Inactive
*PW BOARD C (CM07) incompletely soldered
*Motor (CM49) defective
*Control PW BOARD attached in the final process defective
Belt (CM44) drive
Inactive
*Belt datached or cut
*Motor pulley turns idly
Rotate the GEAR (CM31,30,28,26) ,and SHAFT (CM24), and GEAR (CM27)
Not rotate
*No clearance around the gear shafts
*Foreign matters get caught in the teeth of the gears
*Shaft attaching screws insufficiently tightened
Rotates the gears of HOLDER (CM04) "R" to drive the CARRIAGEs
Inactive
*HOLDER(CM04) "L" is out of sync with "R"
*HOLDER(CM04)"R" insufficiently engaged with the gear(CM27)
*Foreign matters get caught in the teeth of the HOLDER (CM04)"R" and "L"
*Teeth of the HOLDER(CM04)"R" and "L" broken
Stops CARRIAGE at the proper position
Notes:
When a CARRIAGE stops displaced, though no error is detected in the initial operation, the displacement leads DRAWER2 to open. Because, when opening the CARRIAGE at the PLAY position, the displaced CARRIAGE hits the CARRIAGE which rises from the PLAY position, which prevents the latter CARRIAGE from rising further and slides it down


Displayment occurs
*The gear inside HOLDER(CM04) "R" engaged at the displaced position
*The gear of HOLDER(CM04) "R" displaced with the gear of CARRIAGE
*PC BOARD B and Home switch circuit (CM06) defective
*Control PC BOARD attached in the final process defective
Rotates MOTOR DRAWER (CM49)
Inactive
*PC BOARD (CM06,07) incompletely soldered
*MOTOR defective
*Control PC BOARD (CM05) attached in the final defective
Moves DRAWER toward CLOSE
DRAWER will not move
*Belt detached or cut
*MOTOR pulley turns idly
*GEAR IDLER A2(CM39) disengaged with DRAWER due to incomplete engagement of DRAWER with the chassis
*CM39, 40 and 47 gear shaft clearance insufficient
*Foreign matters into CM39, 40 and 47 gears
Completes an initial operation
Not complete an initial operation
*PLATE SPRING (CM29) broken or detached
*SPRING (CM52) broken or detached
*Galling ofARM STOPPER A2 (CM37)
*Galling of ARM STOPPER B (CM38)
*PC BOARD (CM06,07) incompletely soldered
*PC BOARD C (CM06) switch defective
*PC BOARD A (CM05) switches defective
*Control PC BOARD attached in the final process defective
*CARRIAGE (CM13,14) defective
*SPRING (CM46) detached
Confirm to able PLAY mode or not
GOOD
Check the Playback circuit